



Nokia Service Router Linux  
7215 Interconnect System  
7220 Interconnect Router  
7250 Interconnect Router  
7730 Service Interconnect Router  
Release 24.10

## Data Model Reference

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# 1 About this guide

This document describes the configuration and state data models available for the Nokia Service Router Linux (SR Linux).

**Note:**

This guide generically covers the current release and may contain some content that will be released in later maintenance loads. See the *SR Linux Release Notes*, for information about features supported in each load.

Configuration and command outputs shown in this guide are examples only; actual displays may differ depending on supported functionality and user configuration.

For more information about accessing and using the interfaces that support these data models, see the *SR Linux System Management Guide*.

## 2 Overview

This overview describes the structure of the configuration and state data models available for the Nokia Service Router Linux (SR Linux). It includes an introduction to the tree hierarchy and details how to interpret field descriptions.

### 2.1 Tree hierarchy

The tree hierarchy consists of branches that show the fields and parameters that are available. [Figure 1: Tree hierarchy example](#) shows a tree hierarchy example.

*Figure 1: Tree hierarchy example*

```

bfd
- network-instance string
- peer number
  - active-receive-interval
  - active-transmit-interval
  - async
    - last-packet-received
    - last-packet-transmitted
    - received-errored-packets
    - received-packets
    - transmitted-packets
    - up-transitions
  - failure-transitions
  - last-failure-time
  - local-address
  - local-diagnostic-code
  - oper-state
  - remote-address
  - remote-control-plane-independent
  - remote-diagnostic-code
  - remote-discriminator
  - remote-minimum-receive-interval
  - remote-multiplier
  - remote-session-state
  - session-state
  - subscribed-protocols
+ peers number
+ clear
+ statistics
  + peers number
    + clear
  + subinterface string
    + admin-state
    + desired-minimum-transmit-interval
    + detection-multiplier
    + minimum-echo-receive-interval
    + required-minimum-receive
+ total_bfd_sessions
+ total_unmatched_bfd_packets

```

Each chapter of this guide describes a branch in the tree with field names linked to their corresponding descriptions. These descriptions indicate the required syntax for each field. See [Field descriptions](#) for more information.

*Italic names after a field indicate the parameter type. Parameter types include (but are not limited to):*

- Boolean (true and false values)
- keyword (enumerated values)

- string
- number
- IPv4 prefix
- IPv6 prefix
- IPv4 address
- IPv6 address
- MAC address

For more information about the input values, click the field or parameter name in the tree. The link will take you to the description where these values are defined.

A parameter type may also be a combination of different base types. These parameters are displayed in the tree with the individual parameter types enclosed in round brackets and separated by a pipe. For example: *(keyword | number)*

## 2.2 Transaction and report types

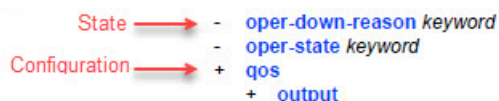
The following transaction and report types are used with the SR Linux:

- configuration transactions
- state transactions
- show reports

Configuration transactions allow you to modify a configuration while state transactions allow you to view the configuration and operational state.

In the tree hierarchy, configuration transactions are denoted with a plus sign (+). State transactions are denoted with a minus sign (-). See [Figure 2: Configuration/state in tree hierarchy](#).

Figure 2: Configuration/state in tree hierarchy



Each field description has a field called "Configurable". The field is set to either:

- true (for configuration transactions)
- false (for state transactions)

Show reports are Python plug-ins used to create custom output. A set of pre-defined show reports are provided and described in the *SR Linux System Management Guide*. These pre-defined reports can be used as examples for how to create additional custom reports.

## 2.3 Hardware platform designation

The platforms field is used to define the hardware platforms that are valid for a transaction. If a transaction is only valid on specific platforms, the designation is similar to the following:

Figure 3: Platforms: applies to designated platforms only

**name string**

<b>Description</b>	Enter the name context
<b>Context</b>	<code>system mirroring mirroring-instance name string mirror-source interface name string</code>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D3L, 7220 IXR-D3, 7220 IXR-D5, 7220 IXR-D2, 7220 IXR-D2L

If a transaction is valid on all platforms, the designation is the following:

Figure 4: Platforms: applies to all platforms

**acl**

<b>Description</b>	Top level enclosing container for ACL operational tools
<b>Context</b>	<code>acl</code>
<b>Tree</b>	<code>acl</code>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## 2.4 Field descriptions

Syntax for each field is displayed in bold, followed by supported parameters and their type. In the example that follows, the **bfd network-instance** field shows that the parameter type is a string:

```
- bfd
  - network-instance string
```

[Table 1: Field descriptions](#) describes valid fields for commands. Not all fields are applicable for all commands.

Table 1: Field descriptions

Field	Description
Context	Configuration path to the command
Tree	Defines the commands location in the tree hierarchy
Description	Describes the command
Configurable	Indicates if the command can be configured (true) or if it is a view-only state command (false)
String Length	For a string, indicates a range (number of characters allowed)

---

Field	Description
Range	For a number, indicates the range of allowed values
Default	Default value
Units	Base unit type
Options	Enumerated values allowed
Reference	Reference to an instance in the configuration needed before the configuration is considered valid
Max Element	For lists and leaf-lists, the maximum number of elements
Platform	Defines the supported hardware platforms

### 2.4.1 References

A description of each parameter is also available from the online CLI help function. See the *SR Linux System Management Guide* for information on using the CLI help.

## 3 acl

```

acl
+ acl-filter name string type keyword
+ description string
+ entry sequence-id number
+ action
  + accept
    + forward
      + next-hop
        + address (ipv4-address | ipv6-address)
    + profile keyword
    + rate-limit
      + policer reference
      + system-cpu-policer reference
  + collect-stats boolean
+ copy
+ drop
+ log boolean
+ description string
- last-clear string
+ match
  + ipv4
    + destination-ip
      + address string
      + mask string
      + prefix string
      + prefix-list name reference
    + dscp-set (number | keyword)
    + first-fragment boolean
    + fragment boolean
    + icmp
      + code number
      + type (number | keyword)
    + protocol (number | keyword)
    + source-ip
      + address string
      + mask string
      + prefix string
      + prefix-list name reference
  + ipv6
    + destination-ip
      + address string
      + mask string
      + prefix string
      + prefix-list name reference
    + dscp-set (number | keyword)
    + icmp6
      + code number
      + type (number | keyword)
    + next-header (number | keyword)
    + source-ip
      + address string
      + mask string
      + prefix string
      + prefix-list name reference
  + l2
    + destination-mac

```

```

    + address string
    + mask string
+ ethertype (string | keyword)
+ source-mac
  + address string
  + mask string
+ vlan
  + outermost-vlan-id
    + none
    + operator keyword
    + range
      + end number
      + start number
    + value number
+ network-instance reference
+ transport
  + destination-port
    + operator keyword
    + range
      + end (number | keyword)
      + start (number | keyword)
    + value (number | keyword)
  + source-port
    + operator keyword
    + range
      + end (number | keyword)
      + start (number | keyword)
    + value (number | keyword)
  + tcp-flags string
- statistics
  - incomplete boolean
  - last-clear string
  - last-match string
  - matched-octets number
  - matched-packets number
  - policer
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
  - system-cpu-policer
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
  - tcam-entries
    - forwarding-complex complex-identifier string
    - input-total number
    - output-total number
    - single-instance number
- last-clear string
+ statistics-per-entry boolean
+ subinterface-specific keyword
- datapath-programming
  - forwarding-complex slot-id number complex-id number
  - last-completed-timestamp string
  - programming-complete boolean
+ egress-mac-filtering boolean
+ interface interface-id string
+ input
  + acl-filter name reference type reference
  - entry sequence-id reference
  - policer
    - conforming-octets number

```

```

    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
  - statistics
    - incomplete boolean
    - last-clear string
    - last-match string
    - matched-octets number
    - matched-packets number
  - statistics
    - last-clear string
  - policer
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
+ interface-ref
+ interface reference
+ subinterface reference
+ output
+ acl-filter name reference type reference
  - entry sequence-id reference
  - policer
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
  - statistics
    - incomplete boolean
    - last-clear string
    - last-match string
    - matched-octets number
    - matched-packets number
  - statistics
    - last-clear string
  - policer
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
+ match-list
+ ipv4-prefix-list name string
+ description string
+ prefix ipv4-prefix string
+ ipv6-prefix-list name string
+ description string
+ prefix ipv6-prefix string
+ policers
+ policer name string
+ entry-specific boolean
+ max-burst number
+ peak-rate number
+ scope keyword
- statistics
  - aggregate
    - conforming-octets number
    - conforming-packets number
    - exceeding-octets number
    - exceeding-packets number
    - last-clear string
+ system-cpu-policer name string
+ entry-specific boolean
+ max-packet-burst number
+ peak-packet-rate number

```



---

```
- statistics
  - conforming-octets number
  - conforming-packets number
  - exceeding-octets number
  - exceeding-packets number
  - last-clear string
+ tcam-profile keyword
```

## 3.1 acl Descriptions

### acl

<b>Description</b>	Top level container for configuration and operational state related to access control lists (ACLs)
<b>Context</b>	<a href="#">acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### acl-filter *name string type keyword*

<b>Description</b>	List of MAC, IPv4, IPv6 filter policies
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	ACL Filter policy name
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### type *keyword*

<b>Description</b>	Defines the type of ACL filter: ipv4: IPv4 ACL filter ipv6: IPv6 ACL filter mac: MAC ACL filter
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4</li> <li>• ipv6</li> <li>• mac</li> </ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **description** *string*

**Description** Description string for the filter policy

**Context** [acl acl-filter name](#) *string type keyword description string*

**Tree** [description](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** Supported on all platforms

### **entry** [sequence-id](#) *number*

**Description** List of ACL entries comprising an ACL Filter

**Context** [acl acl-filter name](#) *string type keyword entry sequence-id number*

**Tree** [entry](#)

**Configurable** True

**Platforms** Supported on all platforms

### **sequence-id** *number*

**Description** A number to indicate the relative evaluation order of the different entries; lower numbered entries are evaluated before higher numbered entries

**Context** [acl acl-filter name](#) *string type keyword entry sequence-id number*

**Range** 0 to 65535

**Configurable** True

**Platforms** Supported on all platforms

### **action**

**Description** Container for the actions to be applied to packets matching the filter entry.

**Context** [acl acl-filter name](#) *string type keyword entry sequence-id number action*

**Tree** [action](#)

**Configurable** True

**Platforms** Supported on all platforms

**accept**

<b>Description</b>	Accept matching packets and forward them towards their normal destination
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a>
<b>Tree</b>	<a href="#">accept</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**forward**

<b>Description</b>	Enable the next-hop context
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">forward</a>
<b>Tree</b>	<a href="#">forward</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop**

<b>Description</b>	Enter the next-hop context
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">forward</a> <a href="#">next-hop</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of next hop to forward matching packets.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">forward</a> <a href="#">next-hop</a> <a href="#">address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	The QoS profile to which the packet is mapped
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">out</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">exceed</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">in-plus</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">in-low</a> Defines packet profile as an input for colour-blind policing at ingress</li> <li>• <a href="#">out-low</a> Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**rate-limit**

<b>Description</b>	Rate-limit accepted packets
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">rate-limit</a>
<b>Tree</b>	<a href="#">rate-limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**policer** *reference*

<b>Description</b>	Reference to a policer
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">action</a> <a href="#">accept</a> <a href="#">rate-limit</a> <a href="#">policer</a> <i>reference</i>
<b>Tree</b>	<a href="#">policer</a>

<b>Reference</b>	acl policers policer name
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### system-cpu-policer *reference*

<b>Description</b>	Reference to a system-cpu-policer.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number action accept rate-limit system-cpu-policer reference</a>
<b>Tree</b>	<a href="#">system-cpu-policer</a>
<b>Reference</b>	acl policers system-cpu-policer name
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### collect-stats *boolean*

<b>Description</b>	Collect statistics for each entry of the ACL. If this is set to false no hardware resources are allocated to collecting statistics for this ACL entry.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number action collect-stats boolean</a>
<b>Tree</b>	<a href="#">collect-stats</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### copy

<b>Description</b>	Create a copy of matching packets extract them to the CPM and deliver them to the designated veth interface
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number action copy</a>
<b>Tree</b>	<a href="#">copy</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**drop**

<b>Description</b>	Drop matching packets. Dropped IP packets do not result in sending ICMP messages back to the source
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">action</a> <b>drop</b>
<b>Tree</b>	<a href="#">drop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**log** *boolean*

<b>Description</b>	When this is true, a log is created for each packet matching the entry For IP packets matched by an IP filter entry the log entry contains the following information:
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">action</a> <b>log</b> <i>boolean</i>
<b>Tree</b>	<a href="#">log</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**description** *string*

<b>Description</b>	Description string for the filter entry
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Time of the last clear command performed by the user at this level
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">last-clear</a> <i>string</i>

<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## match

<b>Description</b>	Container for the conditions that determine whether a packet matches this entry
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a>
<b>Tree</b>	<a href="#">match</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ipv4

<b>Description</b>	Container for the common layer-3 IPv4 match criteria
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## destination-ip

<b>Description</b>	Packet matching criteria based on destination IPv4 address
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## address *string*

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of the mask equals this IP address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a> <a href="#">address</a> <i>string</i>



<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mask string**

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a> <a href="#">mask</a> <i>string</i>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix string**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv4 prefix.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a> <a href="#">prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-list name reference**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv4 prefix list.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name** *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">destination-ip</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl</a> <a href="#">match-list</a> <a href="#">ipv4-prefix-list</a> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp-set** (*number* | *keyword*)

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv4</a> <a href="#">dscp-set</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">dscp-set</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> </ul>

- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**first-fragment** *boolean***Description**

Match the first fragment of an IPv4 datagram

A packet matches the true condition if the IPv4 header indicates that the fragment-offset is zero and the more-fragments bit is 1. It is not valid to configure this leaf without configuring a match value for the fragment leaf.

**Context**

[acl acl-filter name string type keyword entry sequence-id number match ipv4 first-fragment boolean](#)

**Tree**[first-fragment](#)**Configurable**

True

**Platforms**

Supported on all platforms

**fragment** *boolean***Description**

Match an IPv4 fragment

A packet matches the true condition if the IPv4 header indicates that the fragment-offset is zero and the more-fragments bit is 1 or if the IPv4 header indicates that the fragment-offset is greater than 0. A packet matches the false condition if it is unfragmented.

**Context**

[acl acl-filter name string type keyword entry sequence-id number match ipv4 fragment boolean](#)

**Tree**[fragment](#)**Configurable**

True

**Platforms**

Supported on all platforms

**icmp**

<b>Description</b>	A packet matches this condition if its ICMP type and code matches one of the specified combinations  The rule should also have a condition that the IP protocol equals 1 (ICMP) in order for this to be interpreted correctly.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv4 icmp</a>
<b>Tree</b>	<a href="#">icmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**code number**

<b>Description</b>	Match if the ICMP code value is any value in the list  Requires ICMP type to be specified because codes are type dependent.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv4 icmp code number</a>
<b>Tree</b>	<a href="#">code</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type (number | keyword)**

<b>Description</b>	Match a single ICMP type value.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv4 icmp type (number   keyword)</a>
<b>Tree</b>	<a href="#">type</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• echo-reply ICMP Echo Reply</li> <li>• dest-unreachable ICMP Destination Unreachable</li> <li>• source-quench ICMP Source Quench</li> <li>• redirect ICMP Redirect</li> </ul>

	<ul style="list-style-type: none"> <li>• echo ICMP Echo</li> <li>• router-advertise ICMP Router Advertisement</li> <li>• router-solicit ICMP Router Solicitation</li> <li>• time-exceeded ICMP Time Exceeded</li> <li>• param-problem ICMP Parameter Problem</li> <li>• timestamp ICMP Timestamp</li> <li>• timestamp-reply ICMP Timestamp Reply</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **protocol** (*number* | *keyword*)

<b>Description</b>	An IPv4 packet matches this condition if its IP protocol type field matches the specified value
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string type</a> <a href="#">keyword</a> <a href="#">entry sequence-id</a> <a href="#">number</a> <a href="#">match ipv4 protocol</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">protocol</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv6-hop IPv6 hop-by-hop option</li> <li>• icmp Internet Control Message Protocol</li> <li>• igmp Internet Group Management Protocol</li> <li>• ggp Gateway-to-Gateway Protocol</li> <li>• ipv4 IPv4 encapsulation</li> <li>• st Stream Protocol</li> </ul>

- tcp  
Transmission Control Protocol
- egp  
Exterior Gateway Protocol
- igp  
Interior Gateway Protocol
- udp  
User Datagram Protocol
- ipv6  
IPv6 encapsulation
- idrp  
Inter-Domain Routing Protocol
- rsvp  
Resource Reservation Protocol
- gre  
Generic Routing Encapsulation
- esp  
IPSec Encapsulating Security Payload
- ah  
IPSec Authentication Header
- icmp6  
IPSec Authentication Header
- no-next-hdr  
No Next Header for IPv6
- ipv6-dest-opts  
Destination Options for IPv6
- eigrp  
Cisco EIGRP
- ospf  
OSPFv2 and OSPFv3
- pim  
Protocol Independent Multicast
- vrrp  
Virtual Router Redundancy Protocol
- l2tp  
Layer Two Tunneling Protocol

- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

**Configurable** True

**Platforms** Supported on all platforms

### source-ip

**Description** Packet matching criteria based on source IPv4 address

**Context** [acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [ipv4](#) [source-ip](#)

**Tree** [source-ip](#)

**Configurable** True

**Platforms** Supported on all platforms

### address *string*

**Description** Match a packet if its source IP address logically anded with the inverse of the mask equals this IP address.

**Context** [acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [ipv4](#) [source-ip](#) [address](#) [string](#)

**Tree** [address](#)

**Configurable** True

**Platforms** Supported on all platforms

### mask *string*

**Description** Match a packet if its source IP address logically anded with the inverse of this mask equals the configured IP address.

**Context** [acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [ipv4](#) [source-ip](#) [mask](#) [string](#)

**Tree** [mask](#)

**Configurable** True

**Platforms** Supported on all platforms

**prefix string**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv4 prefix.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match ipv4 source-ip</a> <a href="#">prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-list name reference**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv4 prefix list.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match ipv4 source-ip</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name reference**

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match ipv4 source-ip</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl</a> <a href="#">match-list</a> <a href="#">ipv4-prefix-list</a> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6**

<b>Description</b>	Container for the common layer-3 IPv6 match criteria
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match ipv6</a>



<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### destination-ip

<b>Description</b>	Packet matching criteria based on destination IPv6 address
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">destination-ip</a>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### address *string*

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of the mask equals this IP address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">destination-ip</a> <a href="#">address</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### mask *string*

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">destination-ip</a> <a href="#">mask</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### prefix *string*

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv6 prefix.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">destination-ip</a> <a href="#">prefix</a> <a href="#">string</a>

<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **prefix-list name reference**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv6 prefix list.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 destination-ip prefix-list name reference</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **name reference**

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 destination-ip prefix-list name reference</a>
<b>Reference</b>	<a href="#">acl match-list ipv6-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp-set (number | keyword)**

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 dscp-set (number   keyword)</a>
<b>Tree</b>	<a href="#">dscp-set</a>
<b>Range</b>	0 to 63

<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## icmp6

<b>Description</b>	<p>A packet matches this condition if its ICMPv6 type and code matches one of the specified combinations</p> <p>The rule should also have a condition that the next-header value equals 58 (ICMPv6) in order for this to be interpreted correctly.</p>
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">icmp6</a>
<b>Tree</b>	<a href="#">icmp6</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**code number**

<b>Description</b>	Match if the ICMPv6 code value is any value in the list Requires ICMPv6 type to be specified because codes are type dependent.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 icmp6 code number</a>
<b>Tree</b>	<a href="#">code</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type (number | keyword)**

<b>Description</b>	Match a single ICMPv6 type value
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 icmp6 type (number   keyword)</a>
<b>Tree</b>	<a href="#">type</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• dest-unreachable ICMPv6 Destination Unreachable</li> <li>• packet-too-big ICMPv6 Packet Too Big</li> <li>• time-exceeded ICMPv6 Time Exceeded</li> <li>• param-problem Parameter Problem</li> <li>• echo-request ICMPv6 Echo Request</li> <li>• echo-reply ICMPv6 Echo Reply</li> <li>• mld-query Multicast Listener Discovery Query</li> <li>• mld-report Multicast Listener Discovery Report</li> </ul>

- mld-done  
Multicast Listener Discovery Done
- router-solicit  
ICMPv6 Router Solicitation
- router-advertise  
ICMPv6 Router Advertisement
- neighbor-solicit  
ICMPv6 Neighbor Solicitation
- neighbor-advertise  
ICMPv6 Neighbor Advertisement
- redirect  
ICMPv6 Redirect
- router-renumber  
ICMPv6 Router Renumbering
- node-info-query  
ICMPv6 Node Information Query
- node-info-response  
ICMPv6 Node Information Response
- mld-v2  
Multicast Listener Discovery Version 2
- mcast-rtr-adv  
Multicast Router Advertisement
- mcast-rtr-solicit  
Multicast Router Solicitation
- mcast-rtr-term  
Multicast Router Termination

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **next-header** (*number* | *keyword*)

<b>Description</b>	An IPv6 packet matches this condition if its first next-header field (in the IPv6 fixed header) contains the specified value
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">next-header</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">next-header</a>
<b>Range</b>	0 to 255

**Options**

- ipv6-hop  
IPv6 hop-by-hop option
- icmp  
Internet Control Message Protocol
- igmp  
Internet Group Management Protocol
- ggp  
Gateway-to-Gateway Protocol
- ipv4  
IPv4 encapsulation
- st  
Stream Protocol
- tcp  
Transmission Control Protocol
- egp  
Exterior Gateway Protocol
- igp  
Interior Gateway Protocol
- udp  
User Datagram Protocol
- ipv6  
IPv6 encapsulation
- idrp  
Inter-Domain Routing Protocol
- rsvp  
Resource Reservation Protocol
- gre  
Generic Routing Encapsulation
- esp  
IPSec Encapsulating Security Payload
- ah  
IPSec Authentication Header
- icmp6  
IPSec Authentication Header
- no-next-hdr  
No Next Header for IPv6

- ipv6-dest-opts  
Destination Options for IPv6
- eigrp  
Cisco EIGRP
- ospf  
OSPFv2 and OSPFv3
- pim  
Protocol Independent Multicast
- vrrp  
Virtual Router Redundancy Protocol
- l2tp  
Layer Two Tunneling Protocol
- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

**Configurable**

True

**Platforms**

Supported on all platforms

**source-ip****Description**

Packet matching criteria based on source IPv6 address

**Context**[acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [ipv6](#) [source-ip](#)**Tree**[source-ip](#)**Configurable**

True

**Platforms**

Supported on all platforms

**address *string*****Description**

Match a packet if its source IP address logically anded with the inverse of the mask equals this IP address.

**Context**[acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [ipv6](#) [source-ip](#) [address](#) [string](#)**Tree**[address](#)

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mask string**

<b>Description</b>	Match a packet if its source IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">source-ip</a> <a href="#">mask</a> <i>string</i>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix string**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv6 prefix.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">source-ip</a> <a href="#">prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-list name reference**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv6 prefix list.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">ipv6</a> <a href="#">source-ip</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name reference**

<b>Description</b>	Enter the name context
--------------------	------------------------



<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match ipv6 source-ip prefix-list name reference</a>
<b>Reference</b>	<a href="#">acl match-list ipv6-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## I2

<b>Description</b>	Container for the common layer-2 match criteria
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2</a>
<b>Tree</b>	<a href="#">I2</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## destination-mac

<b>Description</b>	Ethernet frame matching criteria based on destination MAC address
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 destination-mac</a>
<b>Tree</b>	<a href="#">destination-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## address string

<b>Description</b>	Match an Ethernet frame if its destination MAC address logically anded with the mask equals this MAC address.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 destination-mac address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mask** *string*

<b>Description</b>	Match an Ethernet frame if its destination MAC address logically anded with the mask equals the configured MAC address.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry sequence-id number match I2 destination-mac mask</a> <i>string</i>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ethertype** (*string | keyword*)

<b>Description</b>	An Ethernet frame matches this condition if its ethertype value (after 802.1Q VLAN tags) matches the specified value
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry sequence-id number match I2 ethertype</a> ( <i>string   keyword</i> )
<b>Tree</b>	<a href="#">ethertype</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4</a> Internet Protocol version 4. Ethertype 0x0800.</li> <li>• <a href="#">arp</a> Address Resolution Protocol. Ethertype 0x0806.</li> <li>• <a href="#">ipv6</a> Internet Protocol version 6. Ethertype 0x86DD.</li> <li>• <a href="#">flow-control</a> Ethernet flow control PAUSE frames. Ethertype 0x8808</li> <li>• <a href="#">lacp</a> LACP. Ethertype 0x8809.</li> <li>• <a href="#">mpls-unicast</a> MPLS unicast. Ethertype 0x8847.</li> <li>• <a href="#">mpls-multicast</a> MPLS multicast. Ethertype 0x8848.</li> <li>• <a href="#">pppoe-discovery</a> PPPoE discovery. Ethertype 0x8863.</li> <li>• <a href="#">pppoe-session</a> PPPoE session. Ethertype 0x8864.</li> <li>• <a href="#">8021x-authentication</a> 802.1x authentication (EAP). Ethertype 0x888E.</li> </ul>

- **lldp**  
Link Layer Discovery Protocol. Ethertype 0x88CC.
- **macsec**  
IEEE 802.1AE MAC security. Ethertype 0x88E5.
- **pbb**  
Provider Backbone Bridging. Ethertype 0x88E7.
- **ptp**  
Precision Time Protocol. Ethertype 0x88F7.
- **eth-oam**  
IEEE 802.1ag CFM and ITU-T Y.1731 OAM. Ethertype 0x8902.
- **fcoe**  
Fibre Channel over Ethernet. Ethertype 0x8906.
- **fcoe-initialization**  
Fibre Channel over Ethernet Initialization Protocol. Ethertype 0x8914.
- **roce**  
RDMA over Converged Ethernet. Ethertype 0x8915.

**Configurable**

True

**Platforms**

Supported on all platforms

**source-mac****Description**

Ethernet frame matching criteria based on source MAC address

**Context**[acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [l2](#) [source-mac](#)**Tree**[source-mac](#)**Configurable**

True

**Platforms**

Supported on all platforms

**address** *string***Description**

Match an Ethernet frame if its source MAC address logically anded with the mask equals this MAC address.

**Context**[acl](#) [acl-filter name](#) [string](#) [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#) [l2](#) [source-mac](#) [address](#) [string](#)**Tree**[address](#)**Configurable**

True

**Platforms**

Supported on all platforms

**mask string**

<b>Description</b>	Match an Ethernet frame if its source MAC address logically anded with the mask equals the configured MAC address.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 source-mac mask string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**vlan**

<b>Description</b>	Ethernet frame matching criteria based on VLAN tags
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 vlan</a>
<b>Tree</b>	<a href="#">vlan</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**outermost-vlan-id**

<b>Description</b>	Ethernet frame matching criteria based on the outermost VLAN ID found before the subinterface-defining VLAN tag (if any) is removed.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 vlan outermost-vlan-id</a>
<b>Tree</b>	<a href="#">outermost-vlan-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**none**

<b>Description</b>	When configured, only untagged frames are matched.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2 vlan outermost-vlan-id none</a>
<b>Tree</b>	<a href="#">none</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**operator** *keyword*

<b>Description</b>	Comparison operator eq = equal ge = greater than or equal to le = less than or equal to
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">match I2</a> <a href="#">vlan</a> <a href="#">outermost-vlan-id</a> <a href="#">operator</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• le Less than or equal.</li> <li>• ge Greater than or equal.</li> <li>• eq Equal to.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**range**

<b>Description</b>	Container used to specify a contiguous range of VLAN IDs. Matched values include the start and end values.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">match I2</a> <a href="#">vlan</a> <a href="#">outermost-vlan-id</a> <a href="#">range</a>
<b>Tree</b>	<a href="#">range</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**end** *number*

<b>Description</b>	The ending VLAN ID to include in the range
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">match I2</a> <a href="#">vlan</a> <a href="#">outermost-vlan-id</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
<b>Tree</b>	<a href="#">end</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**start number**

<b>Description</b>	The starting VLAN ID to include in the range
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2</a> <a href="#">vlan outermost-vlan-id range start number</a>
<b>Tree</b>	<a href="#">start</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**value number**

<b>Description</b>	A VLAN ID number A value of zero is used to match priority-tagged 802.1Q frames.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match I2</a> <a href="#">vlan outermost-vlan-id value number</a>
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance reference**

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match</a> <a href="#">network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**transport**

<b>Description</b>	Container for the common layer-4 transport match criteria
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match</a> <a href="#">transport</a>
<b>Tree</b>	<a href="#">transport</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## destination-port

<b>Description</b>	A packet matches this condition if its destination TCP or UDP port number matches the value or range that is specified  The rule should also have a condition that the IP protocol equals 6 (TCP) or 17 (UDP) in order for this to be interpreted correctly.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match transport destination-port</a>
<b>Tree</b>	<a href="#">destination-port</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## operator *keyword*

<b>Description</b>	Comparison operator  eq = equal ge = greater than or equal to le = less than or equal to
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match transport destination-port operator keyword</a>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• le Less than or equal.</li> <li>• ge Greater than or equal.</li> <li>• eq Equal to.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## range

<b>Description</b>	Container used to specify a contiguous range of TCP/UDP port numbers
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number match transport destination-port range</a>
<b>Tree</b>	<a href="#">range</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **end** (*number* | *keyword*)

<b>Description</b>	The ending port number to include in the range
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport destination-port</a> <a href="#">range</a> <a href="#">end</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">end</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">acap</a> Application Configuration Access Protocol</li> <li>• <a href="#">afp-tcp</a> Apple Filing Protocol over TCP</li> <li>• <a href="#">arns</a> A Remote Network Server System</li> <li>• <a href="#">asf-rmcp</a> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <a href="#">ashare</a> AppleShare IP Web Administration</li> <li>• <a href="#">atalk-rm</a> AppleTalk Routing Maintenance</li> <li>• <a href="#">aurp</a> AppleTalk Update-Based Routing Protocol</li> <li>• <a href="#">auth</a> Authentication Service</li> <li>• <a href="#">bfd</a> Bidirectional Forwarding Detection Single Hop</li> <li>• <a href="#">bfd-echo</a> BFD Echo</li> <li>• <a href="#">bftp</a> Background File Transfer Program</li> <li>• <a href="#">bgmp</a> Border Gateway Multicast Protocol</li> <li>• <a href="#">bgp</a> Border Gateway Protocol</li> </ul>



- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol

- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol

- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system

- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent

- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews

- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server

- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)

- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)



- tcpnethaspsrv  
tcpnethaspsrv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **start** (*number* | *keyword*)

<b>Description</b>	The starting port number to include in the range
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport destination-port range start</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">start</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• acap Application Configuration Access Protocol</li> <li>• afp-tcp Apple Filing Protocol over TCP</li> <li>• arns A Remote Network Server System</li> </ul>

- asf-rmcp  
ASF Remote Management and Control Protocol & IPMI Remote Management Protocol
- ashare  
AppleShare IP Web Administration
- atalk-rm  
AppleTalk Routing Maintenance
- aurp  
AppleTalk Update-Based Routing Protocol
- auth  
Authentication Service
- bfd  
Bidirectional Forwarding Detection Single Hop
- bfd-echo  
BFD Echo
- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications

- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control

- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL

- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol  
(L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldap

- Label Distribution Protocol
- Imp
- Link Management Protocol (LMP)
- login
- rlogin (TCP) or Who (UDP)
- lpd
- Line Printer Daemon
- lsp-ping
- MPLS LSP-echo
- mac-server-adm
- Mac OS X Server administration
- matip-a
- Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b
- Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd
- BFD session over each LAG member link
- microsoft-ds
- Microsoft Directory Services
- mobile-ip
- Mobile IP Agent
- monitor
- Monitor
- mpp
- Message posting protocol (MPP)
- mssql-m
- Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s
- Microsoft SQL Server database management system (MSSQL) server
- msdp
- Multicast Source Discovery Protocol
- ms-exchange
- MS Exchange Routing
- msp
- Message Send Protocol
- multihop-bfd

## Bidirectional Forwarding Detection Multi-Hop

- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr

- Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip



- Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs

- Structured Query Language (SQL) Services
  - sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)

	<ul style="list-style-type: none"> <li>xns-mail Xerox Network Systems (XNS) Mail</li> <li>xns-time Xerox Network Systems (XNS) Time Protocol</li> <li>z3950 ANSI Z39.50</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**value** (*number* | *keyword*)

<b>Description</b>	A destination port number
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport destination-port value</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>acap Application Configuration Access Protocol</li> <li>afp-tcp Apple Filing Protocol over TCP</li> <li>arns A Remote Network Server System</li> <li>asf-rmcp ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>ashare AppleShare IP Web Administration</li> <li>atalk-rm AppleTalk Routing Maintenance</li> <li>aurp AppleTalk Update-Based Routing Protocol</li> <li>auth Authentication Service</li> <li>bfd Bidirectional Forwarding Detection Single Hop</li> <li>bfd-echo BFD Echo</li> </ul>

- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
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Bootstrap Protocol (BOOTP) Server and DHCP Server
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- dnsix  
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File Transfer Protocol data
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BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
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- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
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- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service



- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
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PIM Auto-RP
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Post Office Protocol 3 over TLS/SSL (POP3S)
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- ptp-general  
Precision Time Protocol (PTP) general messages
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Network PostScript print server
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- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
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- rmonitor  
rmonitor, Remote Monitor
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Rpc2portmap
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Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
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SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
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Simple Mail Transfer Protocol (SMTP)
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Structured Query Language (SQL) Service
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Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)

- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethaspsrv  
tcpnethaspsrv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

Supported on all platforms

**source-port****Description**

A packet matches this condition if its source TCP or UDP port number matches the value or range that is specified

The rule should also have a condition that the IP protocol equals 6 (TCP) or 17 (UDP) in order for this to be interpreted correctly.

**Context**

[acl](#) [acl-filter name](#) *string* [type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#)  
[transport](#) [source-port](#)

<b>Tree</b>	<a href="#">source-port</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**operator** *keyword*

<b>Description</b>	Comparison operator eq = equal ge = greater than or equal to le = less than or equal to
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport</a> <a href="#">source-port</a> <a href="#">operator</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• le Less than or equal.</li> <li>• ge Greater than or equal.</li> <li>• eq Equal to.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**range**

<b>Description</b>	Container used to specify a contiguous range of TCP/UDP port numbers
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport</a> <a href="#">source-port</a> <a href="#">range</a>
<b>Tree</b>	<a href="#">range</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**end** (*number* | *keyword*)

<b>Description</b>	The ending port number to include in the range
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport</a> <a href="#">source-port</a> <a href="#">range</a> <a href="#">end</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">end</a>
<b>Range</b>	0 to 65535

**Options**

- acap  
Application Configuration Access Protocol
- afp-tcp  
Apple Filing Protocol over TCP
- arns  
A Remote Network Server System
- asf-rmcp  
ASF Remote Management and Control Protocol & IPMI Remote Management Protocol
- ashare  
AppleShare IP Web Administration
- atalk-rm  
AppleTalk Routing Maintenance
- aurp  
AppleTalk Update-Based Routing Protocol
- auth  
Authentication Service
- bfd  
Bidirectional Forwarding Detection Single Hop
- bfd-echo  
BFD Echo
- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp

- Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
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Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger

- Finger protocol
- ftp
  - File Transfer Protocol control
- ftp-data
  - File Transfer Protocol data
- ftps
  - FTPS (FTP over SSL/TLS) control
- ftps-data
  - FTPS (FTP over SSL/TLS) data
- godi
  - Group Domain Of Interpretation (GDOI) protocol
- gopher
  - Gopher protocol
- gtp-c
  - GTP control messages (GTP-C)
- gtp-prime
  - GTP prime CDR logging protocol
- gtp-u
  - GTP user data messages (GTP-U)
- ha-cluster
  - Linux-HA high-availability heartbeat
- hostname
  - NIC hostname server
- hp-alarm-mgr
  - HP data alarm manager
- http
  - Hypertext Transfer Protocol
- http-alt
  - FileMaker Web Sharing (HTTP Alternate)
- http-mgmt
  - http-mgmt
- http-rpc
  - Remote procedure call over Hypertext Transfer Protocol
- https
  - Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl



- IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell

- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server

- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)

- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol

- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmplib  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)

- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver

- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **start** (*number* | *keyword*)

<b>Description</b>	The starting port number to include in the range
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport source-port range start</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">start</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• acap Application Configuration Access Protocol</li> <li>• afp-tcp Apple Filing Protocol over TCP</li> <li>• arns A Remote Network Server System</li> <li>• asf-rmcp ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• ashare AppleShare IP Web Administration</li> <li>• atalk-rm AppleTalk Routing Maintenance</li> <li>• aurp AppleTalk Update-Based Routing Protocol</li> </ul>

- auth  
Authentication Service
- bfd  
Bidirectional Forwarding Detection Single Hop
- bfd-echo  
BFD Echo
- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server



- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)

- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)

- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol  
(L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping

- MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
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- nas  
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Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc

- IBM RMC (Remote monitoring and Control) protocol
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rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
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SNMP multiplexing protocol (SMUX)
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IBM Systems Network Architecture (SNA) gateway access server
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Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
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Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc

- Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethaspsrv  
tcpnethaspsrv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
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Time Protocol
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Timeserver
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Uninterruptible power supply (UPS)
- xdmcp  
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Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable  
Platforms**

True  
Supported on all platforms



**value** (*number* | *keyword*)

<b>Description</b>	A source port number
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">match</a> <a href="#">transport source-port value</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">acap</a> Application Configuration Access Protocol</li> <li>• <a href="#">afp-tcp</a> Apple Filing Protocol over TCP</li> <li>• <a href="#">arns</a> A Remote Network Server System</li> <li>• <a href="#">asf-rmcp</a> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <a href="#">ashare</a> AppleShare IP Web Administration</li> <li>• <a href="#">atalk-rm</a> AppleTalk Routing Maintenance</li> <li>• <a href="#">aurp</a> AppleTalk Update-Based Routing Protocol</li> <li>• <a href="#">auth</a> Authentication Service</li> <li>• <a href="#">bfd</a> Bidirectional Forwarding Detection Single Hop</li> <li>• <a href="#">bfd-echo</a> BFD Echo</li> <li>• <a href="#">bftp</a> Background File Transfer Program</li> <li>• <a href="#">bgmp</a> Border Gateway Multicast Protocol</li> <li>• <a href="#">bgp</a> Border Gateway Protocol</li> <li>• <a href="#">bootpc</a> Bootstrap Protocol (BOOTP) Client and DHCP Client</li> </ul>

- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol

- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
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- ftp-data  
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- ftps  
FTPS (FTP over SSL/TLS) control
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FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
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http-mgmt
- http-rpc  
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Mobile IP Agent
- monitor  
Monitor

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NETRJS protocol
- netrjs-4  
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Netnews
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new-rwho, new-who
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PIM Auto-RP
- pkix-timestamp  
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- ptp-general  
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- print-srv  
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Quick Mail Transfer Protocol

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Quote of the Day (QOTD)
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RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
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Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
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Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmpp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)



- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
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Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
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Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services

- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

Supported on all platforms

**tcp-flags string****Description**

A logical expression using the &amp;, | and ! logical operators and the TCP flag names: rst, syn and ack.

**Context**[acl](#) [acl-filter name](#) [string type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [match](#)  
[transport tcp-flags string](#)**Tree**[tcp-flags](#)**Configurable**

True

**Platforms**

Supported on all platforms

**statistics****Description**

Container for per-entry statistics

**Context**[acl](#) [acl-filter name](#) [string type](#) [keyword](#) [entry](#) [sequence-id](#) [number](#) [statistics](#)**Tree**[statistics](#)**Configurable**

False

**Platforms** Supported on all platforms

### **incomplete** *boolean*

**Description** Returns true when at least one linecard had insufficient stats resources to ensure an accurate set of values for the number of matched packets.

**Context** [acl](#) [acl-filter name](#) *string type keyword entry sequence-id number statistics incomplete boolean*

**Tree** [incomplete](#)

**Configurable** False

**Platforms** Supported on all platforms

### **last-clear** *string*

**Description** Time of the last clear command performed by the user at this level or a higher level

**Context** [acl](#) [acl-filter name](#) *string type keyword entry sequence-id number statistics last-clear string*

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### **last-match** *string*

**Description** The elapsed time since a packet last matched the entry, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL

**Context** [acl](#) [acl-filter name](#) *string type keyword entry sequence-id number statistics last-match string*

**Tree** [last-match](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

**matched-octets** *number*

<b>Description</b>	The number of octets packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">matched-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">matched-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**matched-packets** *number*

<b>Description</b>	The number of packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">matched-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">matched-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**policer**

<b>Description</b>	Policer stats for traffic matching the entry: Statistics for policer configured with scope=global and entry-specific=true, and acl configured with subinterface-specific=false.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">policer</a>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**conforming-octets** *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry sequence-id</a> <i>number statistics</i> <a href="#">policer conforming-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry sequence-id</a> <i>number statistics</i> <a href="#">policer conforming-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry sequence-id</a> <i>number statistics</i> <a href="#">policer exceeding-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
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<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number statistics policer exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### system-cpu-policer

<b>Description</b>	System CPU policer stats for traffic matching the entry: Statistics for system cpu policer configured with scope=global and entry-specific=true, and acl configured with subinterface-specific=false.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number statistics system-cpu-policer</a>
<b>Tree</b>	<a href="#">system-cpu-policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### conforming-octets *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number statistics system-cpu-policer conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### conforming-packets *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl acl-filter name string type keyword entry sequence-id number statistics system-cpu-policer conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### exceeding-octets *number*

**Description** The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.

**Context** [acl acl-filter name string type keyword entry sequence-id number statistics system-cpu-policer exceeding-octets number](#)

**Tree** [exceeding-octets](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### exceeding-packets *number*

**Description** The number of packets (actually Ethernet frames) that were considered exceeding by the policer

**Context** [acl acl-filter name string type keyword entry sequence-id number statistics system-cpu-policer exceeding-packets number](#)

**Tree** [exceeding-packets](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### tcam-entries

**Description** Information about the TCAM entries used to implement the ACL entry

**Context** [acl acl-filter name string type keyword entry sequence-id number tcam-entries](#)

**Tree** [tcam-entries](#)

**Configurable** False

**Platforms** Supported on all platforms

### forwarding-complex [complex-identifier string](#)

**Description** List of forwarding complexes in the system

**Context** [acl acl-filter name string type keyword entry sequence-id number tcam-entries forwarding-complex complex-identifier string](#)

<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **complex-identifier** *string*

<b>Description</b>	A forwarding complex in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">tcam-entries</a> <a href="#">forwarding-complex</a> <a href="#">complex-identifier</a> <a href="#">string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **input-total** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry on all subinterfaces of this complex where the filter is applied to ingress traffic.  For example, if a single-instance of the entry takes 2 TCAM entries and the filter is an output-only subinterface-specific filter and the filter is applied to 5 subinterfaces on output and to 5 subinterfaces on input then input-total=2. If the entry is not applied to ingress traffic on any subinterfaces of this complex then input-total=0.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">tcam-entries</a> <a href="#">forwarding-complex</a> <a href="#">complex-identifier</a> <a href="#">string</a> <a href="#">input-total</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">input-total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **output-total** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry on all subinterfaces of this complex where the filter is applied to egress traffic.  For example, if a single-instance of the entry takes 2 TCAM entries and the filter is an output-only subinterface-specific filter and the filter is applied to 5 subinterfaces on output and to 5 subinterfaces on input then output-total=10. If the entry is not applied to egress traffic on any subinterfaces of this complex then output-total=0.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <a href="#">name</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <a href="#">number</a> <a href="#">tcam-entries</a> <a href="#">forwarding-complex</a> <a href="#">complex-identifier</a> <a href="#">string</a> <a href="#">output-total</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">output-total</a>



<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **single-instance** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry if it is applied to only one subinterface and one traffic direction specific to this slot.  This is non-zero even if the filter is not applied to any subinterfaces of this complex. It captures the effect of TCAM entry expansion to deal with L4 port or VLAN ranges, for example.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">tcam-entries</a> <a href="#">forwarding-complex</a> <a href="#">complex-identifier</a> <i>string</i> <b>single-instance</b> <i>number</i>
<b>Tree</b>	<a href="#">single-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-clear** *string*

<b>Description</b>	Time of the last clear command performed by the user at this level
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <b>last-clear</b> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **statistics-per-entry** *boolean*

<b>Description</b>	Collect statistics for each entry of the ACL. If this is set to false no hardware resources are allocated to collecting statistics for this ACL policy.  The exact set of statistics depend on the subinterface-specific mode
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <b>statistics-per-entry</b> <i>boolean</i>
<b>Tree</b>	<a href="#">statistics-per-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**subinterface-specific** *keyword*

<b>Description</b>	Controls the instantiation of the filter when it is applied as an input or output ACL  disabled: all subinterfaces on a single linecard that reference the ACL as an input ACL use a shared filter instance, and all subinterfaces on a single linecard that reference the ACL as an output ACL use a shared filter instance  input-only: all subinterfaces on a single linecard that reference the ACL as an output ACL use a shared filter instance, but each subinterface that references the ACL as an input ACL uses its own separate instance of the filter  output-only: all subinterfaces on a single linecard that reference the ACL as an input ACL use a shared filter instance, but each subinterface that references the ACL as an output ACL uses its own separate instance of the filter  input-and-output: each subinterface that references the ACL as either an input ACL or an output ACL uses its own separate instance of the filter
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string</i> <a href="#">type</a> <a href="#">keyword</a> <a href="#">subinterface-specific</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">subinterface-specific</a>
<b>Default</b>	disabled
<b>Options</b>	<ul style="list-style-type: none"> <li>• disabled</li> <li>• input-only</li> <li>• output-only</li> <li>• input-and-output</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**datapath-programming**

<b>Description</b>	Container to represent the progress of ACL datapath programming
<b>Context</b>	<a href="#">acl</a> <a href="#">datapath-programming</a>
<b>Tree</b>	<a href="#">datapath-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**forwarding-complex** [slot-id](#) *number* [complex-id](#) *number*

<b>Description</b>	List of forwarding complexes that are currently installed and online
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<b>Context</b>	<a href="#">acl datapath-programming forwarding-complex slot-id number complex-id number</a>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**slot-id number**

<b>Description</b>	The slot id
<b>Context</b>	<a href="#">acl datapath-programming forwarding-complex slot-id number complex-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**complex-id number**

<b>Description</b>	The complex id
<b>Context</b>	<a href="#">acl datapath-programming forwarding-complex slot-id number complex-id number</a>
<b>Range</b>	0 to 1
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-completed-timestamp string**

<b>Description</b>	The date and time when the forwarding complex last completed all datapath programming related to prior ACL configuration changes.
<b>Context</b>	<a href="#">acl datapath-programming forwarding-complex slot-id number complex-id number last-completed-timestamp string</a>
<b>Tree</b>	<a href="#">last-completed-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**programming-complete boolean**

<b>Description</b>	Reads false when there are still pending entries to program from prior configuration transactions
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	Reads true when all datapath programming related to all prior ACL configuration changes is complete
<b>Context</b>	<a href="#">acl datapath-programming forwarding-complex slot-id number complex-id number programming-complete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">programming-complete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **egress-mac-filtering** *boolean*

<b>Description</b>	<p>Must be set to true in order to apply any MAC ACLs to any subinterface in the egress traffic direction.</p> <p>Internally this sets the following limits:</p> <p>Remember that the number of ACL instances per ACL policy is greater than one if subinterface-specific is set to input-and-output or output-only.</p> <p>A setting of true is blocked if the number of IPv4 ACL instances applied to egress traffic is already greater than 32, or if the number of IPv6 ACL instances applied to egress traffic is already greater than 32.</p>
<b>Context</b>	<a href="#">acl egress-mac-filtering</a> <i>boolean</i>
<b>Tree</b>	<a href="#">egress-mac-filtering</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **interface** [interface-id](#) *string*

<b>Description</b>	List of interfaces and subinterfaces referencing ACL filters.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	16383

### **interface-id** *string*

<b>Description</b>	Identifier for the interface or subinterface.
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<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## input

<b>Description</b>	Container for ACL filters that apply to ingress traffic on the subinterface
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## [acl-filter](#) *name reference type reference*

<b>Description</b>	MAC, IPv4, IPv6 ACL filter(s) to be applied on this subinterface direction On 7220 and 7250 IXR platforms only a single MAC, IPv4 or IPv6 filter is supported.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">acl-filter</a> <i>name reference type reference</i>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

## [name](#) *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">acl-filter</a> <i>name reference type reference</i>
<b>Reference</b>	acl acl-filter name
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## [type](#) *reference*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">acl-filter</a> <i>name reference type reference</i>
<b>Reference</b>	acl acl-filter type

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### entry [sequence-id](#) *reference*

<b>Description</b>	ACL Filter statistics per entry and per subinterface
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### sequence-id *reference*

<b>Description</b>	Reference to type entry ID key
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i>
<b>Reference</b>	acl acl-filter entry sequence-id
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### policer

<b>Description</b>	Policer stats for traffic matching the entry:  Statistics under /acl/interfaces for policer configured with scope=subinterface and entry-specific=true, and acl configured with subinterface-specific=input-and-output.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer</a>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### conforming-octets *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
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<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer conforming-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer conforming-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer exceeding-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer exceeding-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeding-packets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

## statistics

<b>Description</b>	Container for per-entry statistics
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## incomplete *boolean*

<b>Description</b>	Returns true when at least one linecard had insufficient stats resources to ensure an accurate set of values for the number of matched packets.
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics incomplete boolean</a>
<b>Tree</b>	<a href="#">incomplete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-clear *string*

<b>Description</b>	Time of the last clear command performed by the user at this level or a higher level
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **last-match** *string*

<b>Description</b>	The elapsed time since a packet last matched the entry, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics last-match string</a>
<b>Tree</b>	<a href="#">last-match</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **matched-octets** *number*

<b>Description</b>	The number of octets packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics matched-octets number</a>
<b>Tree</b>	<a href="#">matched-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **matched-packets** *number*

<b>Description</b>	The number of packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name reference type reference entry sequence-id reference statistics matched-packets number</a>
<b>Tree</b>	<a href="#">matched-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## statistics

**Description** Container for policer scope=subinterface and per-entry-statistics=false statistics

**Context** [acl interface interface-id string input statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

## last-clear *string*

**Description** Time of the last clear command performed by the user at this level

**Context** [acl interface interface-id string input statistics last-clear string](#)

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

## policer

**Description** Policer stats for traffic matching one or multiple entries:  
List of ACL policer statistics of scope=subinterface and per-entry-statistics=false, and acl configured with subinterface-specific=false.

**Context** [acl interface interface-id string input statistics policer](#)

**Tree** [policer](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**conforming-octets** *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string input statistics policer conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl interface interface-id string input statistics policer conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string input statistics policer exceeding-octets number</a>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input statistics policer exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**interface-ref**

<b>Description</b>	Reference to an interface or subinterface
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">interface-ref</a>
<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface** *reference*

<b>Description</b>	Reference to a base interface, for example a port or LAG
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">interface-ref interface reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**subinterface** *reference*

<b>Description</b>	Reference to a subinterface This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">interface-ref subinterface reference</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## output

<b>Description</b>	Container for ACL filters that apply to egress traffic on the subinterface
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215

## [acl-filter name](#) *reference* [type](#) *reference*

<b>Description</b>	MAC, IPv4, IPv6 ACL filter(s) to be applied on this subinterface direction On 7220 and 7250 IXR platforms only a single MAC, IPv4 or IPv6 filter is supported.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215
<b>Max. Elements</b>	4

## [name](#) *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i>
<b>Reference</b>	acl acl-filter name
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215

## [type](#) *reference*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i>

<b>Reference</b>	acl acl-filter type
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215

### entry [sequence-id](#) *reference*

<b>Description</b>	ACL Filter statistics per entry and per subinterface
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>reference</i> <a href="#">type reference</a> <a href="#">entry sequence-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms except 7215

### sequence-id *reference*

<b>Description</b>	Reference to type entry ID key
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>reference</i> <a href="#">type reference</a> <a href="#">entry sequence-id</a> <i>reference</i>
<b>Reference</b>	acl acl-filter entry sequence-id
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms except 7215

### policer

<b>Description</b>	Policer stats for traffic matching the entry: Statistics under /acl/interfaces for policer configured with scope=subinterface and entry-specific=true, and acl configured with subinterface-specific=input-and-output.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>reference</i> <a href="#">type reference</a> <a href="#">entry sequence-id</a> <i>reference</i> <a href="#">policer</a>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**conforming-octets** *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference policer conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference policer conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference policer exceeding-octets number</a>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference policer exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**statistics**

<b>Description</b>	Container for per-entry statistics
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**incomplete** *boolean*

<b>Description</b>	Returns true when at least one linecard had insufficient stats resources to ensure an accurate set of values for the number of matched packets.
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference statistics incomplete boolean</a>
<b>Tree</b>	<a href="#">incomplete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Time of the last clear command performed by the user at this level or a higher level
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<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference statistics last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **last-match** *string*

<b>Description</b>	The elapsed time since a packet last matched the entry, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference statistics last-match string</a>
<b>Tree</b>	<a href="#">last-match</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **matched-octets** *number*

<b>Description</b>	The number of octets packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id string output acl-filter name reference type reference entry sequence-id reference statistics matched-octets number</a>
<b>Tree</b>	<a href="#">matched-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**matched-packets** *number*

<b>Description</b>	The number of packets matching the entry since it was programmed or since the last clear, considering the mgmt0 subinterface and all subinterfaces of all linecard ports that use the ACL as an input ACL
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>reference</i> <a href="#">type reference entry sequence-id</a> <i>reference</i> <a href="#">statistics matched-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">matched-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**statistics**

<b>Description</b>	Container for policer scope=subinterface and per-entry-statistics=false statistics
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**last-clear** *string*

<b>Description</b>	Time of the last clear command performed by the user at this level
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**policer**

<b>Description</b>	Policer stats for traffic matching one or multiple entries:
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List of ACL policer statistics of scope=subinterface and per-entry-statistics=false, and acl configured with subinterface-specific=false.

<b>Context</b>	<a href="#">acl interface interface-id string output statistics policer</a>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **conforming-octets** *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string output statistics policer conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl interface interface-id string output statistics policer conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl interface interface-id string output statistics policer exceeding-octets number</a>
<b>Tree</b>	<a href="#">exceeding-octets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### exceeding-packets *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
<b>Context</b>	<a href="#">acl interface interface-id string output statistics policer exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### match-list

<b>Description</b>	Top level container for match list model config and operational state data
<b>Context</b>	<a href="#">acl match-list</a>
<b>Tree</b>	<a href="#">match-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-prefix-list [name string](#)

<b>Description</b>	A user defined IPv4 prefix list description
<b>Context</b>	<a href="#">acl match-list ipv4-prefix-list name string</a>
<b>Tree</b>	<a href="#">ipv4-prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 2048

### **name** *string*

**Description** Reference to the name of the IPv4 prefix list

**Context** [acl match-list ipv4-prefix-list name](#) *string*

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

**Description** Description string for the prefix list

**Context** [acl match-list ipv4-prefix-list name](#) *string* [description](#) *string*

**Tree** [description](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** [ipv4-prefix](#) *string*

**Description** List of IPv4 prefixes

**Context** [acl match-list ipv4-prefix-list name](#) *string* [prefix](#) [ipv4-prefix](#) *string*

**Tree** [prefix](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 8192

**Min. Elements** 1

**ipv4-prefix string**

<b>Description</b>	A user defined IPv4 prefix
<b>Context</b>	<a href="#">acl match-list ipv4-prefix-list name string prefix ipv4-prefix string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-prefix-list name string**

<b>Description</b>	A user defined IPv6 prefix list description
<b>Context</b>	<a href="#">acl match-list ipv6-prefix-list name string</a>
<b>Tree</b>	<a href="#">ipv6-prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2048

**name string**

<b>Description</b>	Reference to the name of the IPv6 prefix list
<b>Context</b>	<a href="#">acl match-list ipv6-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description string**

<b>Description</b>	Description string for the prefix list
<b>Context</b>	<a href="#">acl match-list ipv6-prefix-list name string description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix *ipv6-prefix string*

<b>Description</b>	List of IPv6 prefixes
<b>Context</b>	<a href="#">acl match-list ipv6-prefix-list name string prefix ipv6-prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	8192
<b>Min. Elements</b>	1

### ipv6-prefix *string*

<b>Description</b>	A user defined IPv6 prefix
<b>Context</b>	<a href="#">acl match-list ipv6-prefix-list name string prefix ipv6-prefix string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### policers

<b>Description</b>	Container for policer definitions used by ACL entries
<b>Context</b>	<a href="#">acl policers</a>
<b>Tree</b>	<a href="#">policers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**policer** *name string*

<b>Description</b>	List of policer templates used in subinterface and CPM Filter ACL.
<b>Context</b>	<a href="#">acl policers policer name string</a>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	User-defined name of the policer
<b>Context</b>	<a href="#">acl policers policer name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entry-specific** *boolean*

<b>Description</b>	Controls the instantiation of the policer between filter entries false: one policer instance is created from this template and it is shared by all entries of in the same ACL filter that refer to this policer true: multiple policer instances are created from this template, one for each ACL filter entry that refers to this policer
<b>Context</b>	<a href="#">acl policers policer name string entry-specific boolean</a>
<b>Tree</b>	<a href="#">entry-specific</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-burst** *number*

<b>Description</b>	The MBS bucket depth in bytes
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<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">max-burst</a> <i>number</i>
<b>Tree</b>	<a href="#">max-burst</a>
<b>Range</b>	1 to 125000000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peak-rate** *number*

<b>Description</b>	The PIR rate in kbps (bucket empty/fill rate).
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">peak-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate</a>
<b>Range</b>	1 to 800000000
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scope** *keyword*

<b>Description</b>	Controls the instantiation of the policer between subinterfaces global: policer is instantiated per direction and shared between ACL, requires filter subinterface-specific disabled subinterface: policer is instantiated per subinterface and per direction, requires filter subinterface-specific input-and-ouput
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">scope</a> <i>keyword</i>
<b>Tree</b>	<a href="#">scope</a>
<b>Default</b>	global
<b>Options</b>	<ul style="list-style-type: none"> <li>• global</li> <li>• subinterface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

## statistics

<b>Description</b>	Container for linecard policer statistics.
<b>Context</b>	<a href="#">acl policers policer name string statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aggregate

<b>Description</b>	<p>None of these statistics are populated if the policer is configured as entry-specific=true.</p> <p>If entry-specific=false and subinterface-specific=true, this is sum of all the entries and all the policer templates instantiated for all subintrefaces.</p> <p>If entry-specific=false and subinterface-specific=false, this is sum of all the entries using this policer template.</p>
<b>Context</b>	<a href="#">acl policers policer name string statistics aggregate</a>
<b>Tree</b>	<a href="#">aggregate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## conforming-octets *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl policers policer name string statistics aggregate conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics aggregate conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics aggregate exceeding-octets number</a>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics aggregate exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10,

7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b,  
7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Time of the last clear command that applied to these statistics
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics aggregate last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-cpu-policer** [name](#) *string*

<b>Description</b>	List of system CPU policer templates. For each policer in this list one or more policer instances are implemented in the XDP-CPM software and these policer instances process the aggregate of terminating traffic received from all linecards.
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i>
<b>Tree</b>	<a href="#">system-cpu-policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **name** *string*

<b>Description</b>	User-defined name of the policer
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **entry-specific** *boolean*

<b>Description</b>	If set to false, only one policer instance is created from this template and it is shared by all entries of all cpm-filter ACLs that refer to this policer.
--------------------	---

If set to true, multiple policer instances are created from this template, one for each cpm-filter entry that refers to the policer template.

<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">entry-specific</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entry-specific</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **max-packet-burst** *number*

<b>Description</b>	The maximum depth of the policer bucket in number of packets
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">max-packet-burst</a> <i>number</i>
<b>Tree</b>	<a href="#">max-packet-burst</a>
<b>Range</b>	16 to 4000000
<b>Default</b>	16
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **peak-packet-rate** *number*

<b>Description</b>	The maximum number of packets per second (bucket empty/fill rate)
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">peak-packet-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-packet-rate</a>
<b>Range</b>	1 to 4000000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Container for system CPU policer statistics None of these statistics are populated if the policer is configured as entry-specific=true.
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**conforming-octets** *number*

<b>Description</b>	The number of bytes that were considered conforming by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics conforming-octets number</a>
<b>Tree</b>	<a href="#">conforming-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**conforming-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered conforming by the policer
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics conforming-packets number</a>
<b>Tree</b>	<a href="#">conforming-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**exceeding-octets** *number*

<b>Description</b>	The number of bytes that were considered exceeding by the policer. The byte count includes 18 bytes of Ethernet overhead for every IP packet.
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics exceeding-octets number</a>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**exceeding-packets** *number*

<b>Description</b>	The number of packets (actually Ethernet frames) that were considered exceeding by the policer
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<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics exceeding-packets number</a>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Time of the last clear command that applied to these statistics
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tcam-profile** *keyword*

<b>Description</b>	Specify the TCAM resource management profile
<b>Context</b>	<a href="#">acl tcam-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tcam-profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• default Default allocation that provides twice as many resources to ingress ACLs as egress ACLs</li> <li>• ipv4-egress-scaled Alternate allocation that provides more resources to IPv4 egress ACLs than any other application</li> <li>• acl-mfc-ipv4-only Alternate allocation that provides maximum entries for IPv4 ACLs and IPv4 MFC policies and provides no space for MAC ACLs, IPv6 ACLs or IPv6 MFC policies</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5

## 4 bfd

```

bfd
+ micro-bfd-sessions
+ lag-interface name reference
+ admin-state keyword
+ desired-minimum-transmit-interval number
+ detection-multiplier number
+ local-address (ipv4-address | ipv6-address)
- member-interface name string
- active-receive-interval number
- active-transmit-interval number
- async
- last-clear string
- last-packet-received string
- last-packet-transmitted string
- received-errored-packets number
- received-packets number
- transmitted-packets number
- up-transitions number
- failure-transitions number
- last-failure-time string
- last-state-transition string
- local-diagnostic-code keyword
- local-discriminator number
- remote-control-plane-independent boolean
- remote-diagnostic-code keyword
- remote-discriminator number
- remote-minimum-receive-interval number
- remote-multiplier number
- remote-session-state keyword
- session-state keyword
+ remote-address (ipv4-address | ipv6-address)
+ required-minimum-receive number
- network-instance name string
- peer local-discriminator number
- active-receive-interval number
- active-transmit-interval number
- async
- last-clear string
- last-packet-received string
- last-packet-transmitted string
- received-errored-packets number
- received-packets number
- transmitted-packets number
- up-transitions number
- failure-transitions number
- ipv4-unnumbered-interface string
- ipv6-link-local-interface string
- last-failure-time string
- last-state-transition string
- local-address (ipv4-address | ipv6-address)
- local-diagnostic-code keyword
- oper-state keyword
- remote-address (ipv4-address | ipv6-address)
- remote-control-plane-independent boolean
- remote-diagnostic-code keyword
- remote-discriminator number

```



```
- remote-minimum-receive-interval number
- remote-multiplier number
- remote-session-state keyword
- session-state keyword
- sr-policy-endpoint (ipv4-address | ipv6-address)
- subscribed-protocols string
- te-policy-name string
- te-policy-protocol-origin keyword
- te-policy-segment-list-index number
- te-policy-segment-list-lsp-index number
- te-policy-type keyword
+ subinterface id string
+ admin-state keyword
+ desired-minimum-transmit-interval number
+ detection-multiplier number
+ max-hop-count number
+ minimum-echo-receive-interval number
+ required-minimum-receive number
- total-bfd-sessions number
- total-unmatched-bfd-packets number
```

## 4.1 bfd Descriptions

### bfd

<b>Description</b>	Context to configure BFD parameters and report BFD sessions state
<b>Context</b>	<a href="#">bfd</a>
<b>Tree</b>	<a href="#">bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### micro-bfd-sessions

<b>Description</b>	Context to configure micro-BFD session parameters and report sessions state
<b>Context</b>	<a href="#">bfd micro-bfd-sessions</a>
<b>Tree</b>	<a href="#">micro-bfd-sessions</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lag-interface [name reference](#)

<b>Description</b>	List of interface references to associate a micro-BFD session config and state
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name reference</a>
<b>Tree</b>	<a href="#">lag-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *reference*

<b>Description</b>	Reference ID for associated lag interface Example: lag1 (Reference Interface lag1).
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable BFD for this subinterface
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**desired-minimum-transmit-interval** *number*

<b>Description</b>	<p>The minimum interval between transmission of BFD control packets</p> <p>This value is advertised to the peer, however the actual interval used is specified by taking the maximum of desired-minimum-transmit-interval and the value of the remote required-minimum-receive interval value. This value is specified as an integer number of microseconds.</p>
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">desired-minimum-transmit-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">desired-minimum-transmit-interval</a>
<b>Range</b>	10000 to 100000000
<b>Default</b>	1000000

<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detection-multiplier** *number*

<b>Description</b>	The number of packets that must be missed to declare this session as down The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">detection-multiplier number</a>
<b>Tree</b>	<a href="#">detection-multiplier</a>
<b>Range</b>	3 to 20
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-address** (*ipv4-address | ipv6-address*)

<b>Description</b>	IP address to be used as source address in BFD packets
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">local-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **member-interface** *name string*

<b>Description</b>	List of interface references to associate a micro-BFD session config and state
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<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">member-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Reference ID for associated interface Example: ethernet-2/1 (Reference Interface ethernet-2/1).
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-receive-interval** *number*

<b>Description</b>	The receive interval currently being used by this BFD session This is the amount of time the BFD state machine expects between receiving BFD messages from the remote peer.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">active-receive-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">active-receive-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-transmit-interval** *number*

<b>Description</b>	The transmit interval currently being used by this BFD session This is the amount of time the local BFD agent will wait between the sending of BFD messages to the remote peer
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<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string active-transmit-interval number</i>
<b>Tree</b>	<a href="#">active-transmit-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## async

<b>Description</b>	Container for async BFD operational state parameters
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string async</i>
<b>Tree</b>	<a href="#">async</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-clear *string*

<b>Description</b>	Timestamp of the last time the session counters were cleared.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string async last-clear string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-packet-received *string*

<b>Description</b>	Timestamp for when the last BFD packet was received for this session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string async last-packet-received string</i>
<b>Tree</b>	<a href="#">last-packet-received</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-packet-transmitted *string*

<b>Description</b>	Timestamp for when the last BFD packet was transmitted for this session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">async last-packet-transmitted</a> <i>string</i>
<b>Tree</b>	<a href="#">last-packet-transmitted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-errored-packets *number*

<b>Description</b>	Counter for the number of BFD packets received with BFD level errors
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">async received-errored-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">received-errored-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-packets *number*

<b>Description</b>	Counter for the number of BFD packets received for this session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">async received-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">received-packets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

<b>Description</b>	Counter for the number of BFD packets transmitted for this session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">async transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### up-transitions *number*

<b>Description</b>	Counter for the number of UP transitions for this BFD session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">async up-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">up-transitions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failure-transitions *number*

<b>Description</b>	The number of times that the BFD session has transitioned out of the up state
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">failure-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">failure-transitions</a>



<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-failure-time** *string*

<b>Description</b>	Timestamp of the last BFD session transition out of the up state to down state
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">last-failure-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failure-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-state-transition** *string*

<b>Description</b>	Timestamp of the last micro-BFD session transition from any state to any state Time of the session in the current state can be calculated from this value.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">last-state-transition</a> <i>string</i>
<b>Tree</b>	<a href="#">last-state-transition</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-diagnostic-code** *keyword*

<b>Description</b>	The local BFD diagnostic code indicating the most recent reason for failure of this BFD session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">local-diagnostic-code</a> <i>keyword</i>

<b>Tree</b>	<a href="#">local-diagnostic-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>NO_DIAGNOSTIC</b> No diagnostic code was specified, or the session has not changed state</li> <li>• <b>DETECTION_TIMEOUT</b> The control detection time expired: no BFD packet was received within the required period</li> <li>• <b>ECHO_FAILED</b> The BFD echo function failed - echo packets have not been received for the required period of time</li> <li>• <b>NEIGHBOR_SIGNED_DOWN</b> The neighbor signaled session down</li> <li>• <b>FORWARDING_RESET</b> The forwarding plane in the local system was reset The remote system cannot rely on the forwarding state of the device specifying this error code.</li> <li>• <b>PATH_DOWN</b> Signalling outside of BFD specified that the path underlying this session has failed</li> <li>• <b>CONCATENATED_PATH_DOWN</b> A segment on the path between source and destination has failed When a BFD session runs over a series of path segments, this error code indicates that a subsequent path segment (i.e., one in the transmit path between the source and destination of the session) has failed.</li> <li>• <b>ADMIN_DOWN</b> The BFD session has been administratively disabled by the peer</li> <li>• <b>REVERSE_CONCATENATED_PATH_DOWN</b> A segment on the reverse path between destination and source has failed In the case that a BFD session is running over a series of path segments, this error code indicates that a path segment on the reverse path (i.e., in the transmit direction from the destination to the source of the session) has failed.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-discriminator *number***

<b>Description</b>	BFD session local discriminator
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">local-discriminator number</a>
<b>Tree</b>	<a href="#">local-discriminator</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-control-plane-independent *boolean***

<b>Description</b>	Indicates if the remote neighbor has set the control independent flag
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">remote-control-plane-independent boolean</a>
<b>Tree</b>	<a href="#">remote-control-plane-independent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-diagnostic-code *keyword***

<b>Description</b>	The remote BFD diagnostic code indicating the remote system's reason for failure of the BFD session
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">remote-diagnostic-code keyword</a>
<b>Tree</b>	<a href="#">remote-diagnostic-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• NO_DIAGNOSTIC No diagnostic code was specified, or the session has not changed state</li> <li>• DETECTION_TIMEOUT The control detection time expired: no BFD packet was received within the required period</li> <li>• ECHO_FAILED The BFD echo function failed - echo packets have not been received for the required period of time</li> </ul>

- **NEIGHBOR\_SINGALED\_DOWN**  
The neighbor signaled session down
- **FORWARDING\_RESET**  
The forwarding plane in the local system was reset  
The remote system cannot rely on the forwarding state of the device specifying this error code.
- **PATH\_DOWN**  
Signalling outside of BFD specified that the path underlying this session has failed
- **CONCATENATED\_PATH\_DOWN**  
A segment on the path between source and destination has failed  
When a BFD session runs over a series of path segments, this error code indicates that a subsequent path segment (i.e., one in the transmit path between the source and destination of the session) has failed.
- **ADMIN\_DOWN**  
The BFD session has been administratively disabled by the peer
- **REVERSE\_CONCATENATED\_PATH\_DOWN**  
A segment on the reverse path between destination and source has failed  
In the case that a BFD session is running over a series of path segments, this error code indicates that a path segment on the reverse path (i.e., in the transmit direction from the destination to the source of the session) has failed.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-discriminator number****Description**

A unique identifier used by the remote system to identify this BFD session

**Context**

[bfd micro-bfd-sessions lag-interface name](#) *reference* [member-interface name](#) *string* [remote-discriminator number](#)

**Tree**[remote-discriminator](#)**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-minimum-receive-interval** *number*

<b>Description</b>	The value of the minimum receive interval that was specified by the peer This value references the value in the most recent BFD control packet received from the peer.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">remote-minimum-receive-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-minimum-receive-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-multiplier** *number*

<b>Description</b>	The current number of packets that must be missed to declare the session as down The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">remote-multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-multiplier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-session-state** *keyword*

<b>Description</b>	The reported state of the BFD session according to the remote system This state reflects the last state reported in a BFD control packet.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">member-interface name</a> <i>string</i> <a href="#">remote-session-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">remote-session-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ADMIN_DOWN The BFD session is administratively disabled</li> <li>DOWN</li> </ul>

- The BFD session is perceived to be down by the system
- INIT
  - The BFD session is perceived to be initialising by the system
- UP
  - The BFD session is perceived to be up by the system

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-state** *keyword***Description**

The state of the BFD session perceived by the local system

**Context**

[bfd micro-bfd-sessions lag-interface name](#) *reference* [member-interface name](#)  
*string session-state keyword*

**Tree**[session-state](#)**Options**

- ADMIN\_DOWN
  - The BFD session is administratively disabled
- DOWN
  - The BFD session is perceived to be down by the system
- INIT
  - The BFD session is perceived to be initialising by the system
- UP
  - The BFD session is perceived to be up by the system

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** (*ipv4-address | ipv6-address*)**Description**

The remote IP address for the far-end of the BFD session  
 This must be the same IP version as the local-address.

**Context**

[bfd micro-bfd-sessions lag-interface name](#) *reference* [remote-address](#) (*ipv4-address | ipv6-address*)

**Tree**[remote-address](#)

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### required-minimum-receive *number*

<b>Description</b>	The minimum interval between received BFD control packets that this system should support  This value is advertised to the remote peer to indicate the maximum frequency (i.e., minimum inter-packet interval) between BFD control packets that is acceptable to the local system. This value is specified as an integer number of microseconds.
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>reference</i> <a href="#">required-minimum-receive number</a>
<b>Tree</b>	<a href="#">required-minimum-receive</a>
<b>Range</b>	10000 to 100000000
<b>Default</b>	1000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance [name string](#)

<b>Description</b>	network-instance context for BFD session.
<b>Context</b>	<a href="#">bfd network-instance name string</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	A unique name identifying the network instance
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<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peer [local-discriminator](#) *number*

<b>Description</b>	BFD session state related to this peer
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-discriminator *number*

<b>Description</b>	BFD session local discriminator
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-receive-interval *number*

<b>Description</b>	The receive interval currently being used by this BFD session This is the amount of time the BFD state machine expects between receiving BFD messages from the remote peer.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">active-receive-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">active-receive-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250



IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **active-transmit-interval** *number*

<b>Description</b>	The transmit interval currently being used by this BFD session  This is the amount of time the local BFD agent will wait between the sending of BFD messages to the remote peer
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">active-transmit-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">active-transmit-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **async**

<b>Description</b>	Container for async BFD operational state parameters
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async</a>
<b>Tree</b>	<a href="#">async</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Timestamp of the last time the session counters were cleared.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async</a> <a href="#">last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-packet-received** *string*

<b>Description</b>	Timestamp for when the last BFD packet was received for this session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async</a> <a href="#">last-packet-received</a> <i>string</i>
<b>Tree</b>	<a href="#">last-packet-received</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-packet-transmitted** *string*

<b>Description</b>	Timestamp for when the last BFD packet was transmitted for this session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async</a> <a href="#">last-packet-transmitted</a> <i>string</i>
<b>Tree</b>	<a href="#">last-packet-transmitted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-errored-packets** *number*

<b>Description</b>	Counter for the number of BFD packets received with BFD level errors
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async</a> <a href="#">received-errored-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">received-errored-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-packets** *number*

<b>Description</b>	Counter for the number of BFD packets received for this session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async received-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">received-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted-packets** *number*

<b>Description</b>	Counter for the number of BFD packets transmitted for this session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-transitions** *number*

<b>Description</b>	Counter for the number of UP transitions for this BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">async up-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">up-transitions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failure-transitions** *number*

<b>Description</b>	The number of times that the BFD session has transitioned out of the up state
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">failure-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">failure-transitions</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-unnumbered-interface** *string*

<b>Description</b>	For IPv4 unnumbered sessions only, indicates the local interface with which the session is associated.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">ipv4-unnumbered-interface</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-unnumbered-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-link-local-interface** *string*

<b>Description</b>	For IPv6 link local sessions only, indicates the local interface with which the session is associated.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">ipv6-link-local-interface</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-link-local-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-failure-time** *string*

<b>Description</b>	Timestamp of the last BFD session transition out of the up state to down state
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">last-failure-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failure-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-state-transition** *string*

<b>Description</b>	Timestamp of the last BFD session transition from any state to any state Time of the session in the current state can be calculated from this value.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">last-state-transition</a> <i>string</i>
<b>Tree</b>	<a href="#">last-state-transition</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address to be used as source address in BFD packets
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-diagnostic-code** *keyword*

<b>Description</b>	The local BFD diagnostic code indicating the most recent reason for failure of this BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">local-diagnostic-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-diagnostic-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>NO_DIAGNOSTIC</b> No diagnostic code was specified, or the session has not changed state</li> <li>• <b>DETECTION_TIMEOUT</b> The control detection time expired: no BFD packet was received within the required period</li> <li>• <b>ECHO_FAILED</b> The BFD echo function failed - echo packets have not been received for the required period of time</li> <li>• <b>NEIGHBOR_SIGNED_DOWN</b> The neighbor signaled session down</li> <li>• <b>FORWARDING_RESET</b> The forwarding plane in the local system was reset The remote system cannot rely on the forwarding state of the device specifying this error code.</li> <li>• <b>PATH_DOWN</b> Signalling outside of BFD specified that the path underlying this session has failed</li> <li>• <b>CONCATENATED_PATH_DOWN</b> A segment on the path between source and destination has failed When a BFD session runs over a series of path segments, this error code indicates that a subsequent path segment (i.e., one in the transmit path between the source and destination of the session) has failed.</li> <li>• <b>ADMIN_DOWN</b> The BFD session has been administratively disabled by the peer</li> <li>• <b>REVERSE_CONCATENATED_PATH_DOWN</b> A segment on the reverse path between destination and source has failed In the case that a BFD session is running over a series of path segments, this error code indicates that a path segment on the reverse path (i.e., in the transmit direction from the destination to the source of the session) has failed.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

**Description** Details the operational state of the session

**Context** [bfd network-instance name](#) *string* [peer local-discriminator number](#) [oper-state keyword](#)

**Tree** [oper-state](#)

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** (*ipv4-address* | *ipv6-address*)**Description**

The remote IP address for the far-end of the BFD session

This must be the same IP version as the local-address.

**Context**

[bfd network-instance name](#) *string* [peer local-discriminator number](#) [remote-address](#) (*ipv4-address* | *ipv6-address*)

**Tree**

[remote-address](#)

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-control-plane-independent** *boolean***Description**

Indicates if the remote neighbor has set the control independent flag

**Context**

[bfd network-instance name](#) *string* [peer local-discriminator number](#) [remote-control-plane-independent](#) *boolean*

**Tree**

[remote-control-plane-independent](#)

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-diagnostic-code** *keyword***Description**

The remote BFD diagnostic code indicating the remote system's reason for failure of the BFD session



<b>Context</b>	<code>bfd network-instance name string peer local-discriminator number remote-diagnostic-code keyword</code>
<b>Tree</b>	<code>remote-diagnostic-code</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>NO_DIAGNOSTIC</b> No diagnostic code was specified, or the session has not changed state</li> <li>• <b>DETECTION_TIMEOUT</b> The control detection time expired: no BFD packet was received within the required period</li> <li>• <b>ECHO_FAILED</b> The BFD echo function failed - echo packets have not been received for the required period of time</li> <li>• <b>NEIGHBOR_SIGNED_DOWN</b> The neighbor signaled session down</li> <li>• <b>FORWARDING_RESET</b> The forwarding plane in the local system was reset The remote system cannot rely on the forwarding state of the device specifying this error code.</li> <li>• <b>PATH_DOWN</b> Signalling outside of BFD specified that the path underlying this session has failed</li> <li>• <b>CONCATENATED_PATH_DOWN</b> A segment on the path between source and destination has failed When a BFD session runs over a series of path segments, this error code indicates that a subsequent path segment (i.e., one in the transmit path between the source and destination of the session) has failed.</li> <li>• <b>ADMIN_DOWN</b> The BFD session has been administratively disabled by the peer</li> <li>• <b>REVERSE_CONCATENATED_PATH_DOWN</b> A segment on the reverse path between destination and source has failed In the case that a BFD session is running over a series of path segments, this error code indicates that a path segment on the reverse path (i.e., in the transmit direction from the destination to the source of the session) has failed.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-discriminator** *number*

<b>Description</b>	A unique identifier used by the remote system to identify this BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">remote-discriminator</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-discriminator</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-minimum-receive-interval** *number*

<b>Description</b>	The value of the minimum receive interval that was specified by the peer  This value references the value in the most recent BFD control packet received from the peer.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">remote-minimum-receive-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-minimum-receive-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-multiplier** *number*

<b>Description</b>	The current number of packets that must be missed to declare the session as down  The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">remote-multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-multiplier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-session-state** *keyword*

<b>Description</b>	The reported state of the BFD session according to the remote system This state reflects the last state reported in a BFD control packet.
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">remote-session-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">remote-session-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ADMIN_DOWN The BFD session is administratively disabled</li> <li>DOWN The BFD session is perceived to be down by the system</li> <li>INIT The BFD session is perceived to be initialising by the system</li> <li>UP The BFD session is perceived to be up by the system</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-state** *keyword*

<b>Description</b>	The state of the BFD session perceived by the local system
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">session-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">session-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ADMIN_DOWN The BFD session is administratively disabled</li> <li>DOWN The BFD session is perceived to be down by the system</li> <li>INIT The BFD session is perceived to be initialising by the system</li> <li>UP The BFD session is perceived to be up by the system</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-policy-endpoint (*ipv4-address* | *ipv6-address*)

**Description** SR-Policy endpoint IP address associated with this seamless BFD session

**Context** [bfd network-instance name](#) *string* [peer local-discriminator number](#) [sr-policy-endpoint](#) (*ipv4-address* | *ipv6-address*)

**Tree** [sr-policy-endpoint](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subscribed-protocols *string*

**Description** Indicates the set of protocols that currently use this BFD session for liveliness detection

**Context** [bfd network-instance name](#) *string* [peer local-discriminator number](#) [subscribed-protocols](#) *string*

**Tree** [subscribed-protocols](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-policy-name *string*

**Description** Name of the TE-Policy associated with this seamless BFD session

**Context** [bfd network-instance name](#) *string* [peer local-discriminator number](#) [te-policy-name](#) *string*

**Tree** [te-policy-name](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-policy-protocol-origin** *keyword*

<b>Description</b>	Indicates the protocol type used to originate the TE-Policy associated with this seamless BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">te-policy-protocol-origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">te-policy-protocol-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• LOCAL The associated TE-Policy originated from local configuration</li> <li>• PCEP The associated TE-Policy from a PCEP controller</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-policy-segment-list-index** *number*

<b>Description</b>	Indicates the segment list index of the TE-Policy associated with this seamless BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">te-policy-segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">te-policy-segment-list-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-policy-segment-list-lsp-index** *number*

<b>Description</b>	Indicates the lsp index for the segment list of the TE-Policy associated with this seamless BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator</a> <i>number</i> <a href="#">te-policy-segment-list-lsp-index</a> <i>number</i>
<b>Tree</b>	<a href="#">te-policy-segment-list-lsp-index</a>
<b>Configurable</b>	False

<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### te-policy-type *keyword*

<b>Description</b>	Type of TE-Policy associated with this seamless BFD session
<b>Context</b>	<a href="#">bfd network-instance name</a> <i>string</i> <a href="#">peer local-discriminator number</a> <a href="#">te-policy-type keyword</a>
<b>Tree</b>	<a href="#">te-policy-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• sr-mpls-colored</li> <li>• sr-mpls-uncolored</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *id string*

<b>Description</b>	List of subinterface references to associating BFD config and state
<b>Context</b>	<a href="#">bfd subinterface id</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### id *string*

<b>Description</b>	Reference ID for associated subinterface Example: ethernet-2/1.100 (Reference Interface ethernet-2/1, subinterface 100).
<b>Context</b>	<a href="#">bfd subinterface id</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250

IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable BFD for this subinterface
<b>Context</b>	<a href="#">bfd subinterface id</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **desired-minimum-transmit-interval** *number*

<b>Description</b>	<p>The minimum interval between transmission of BFD control packets</p> <p>This value is advertised to the peer, however the actual interval used is specified by taking the maximum of desired-minimum-transmit-interval and the value of the remote required-minimum-receive interval value. This value is specified as an integer number of microseconds.</p>
<b>Context</b>	<a href="#">bfd subinterface id</a> <i>string</i> <a href="#">desired-minimum-transmit-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">desired-minimum-transmit-interval</a>
<b>Range</b>	10000 to 100000000
<b>Default</b>	1000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detection-multiplier** *number*

<b>Description</b>	The number of packets that must be missed to declare this session as down
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The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.

<b>Context</b>	<a href="#">bfd subinterface id string detection-multiplier number</a>
<b>Tree</b>	<a href="#">detection-multiplier</a>
<b>Range</b>	3 to 20
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-hop-count** *number*

<b>Description</b>	TTL to be used in the BFD IP header for multihop BFD.
<b>Context</b>	<a href="#">bfd subinterface id string max-hop-count number</a>
<b>Tree</b>	<a href="#">max-hop-count</a>
<b>Range</b>	2 to 255
<b>Default</b>	255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **minimum-echo-receive-interval** *number*

<b>Description</b>	The minimum interval between echo packets the local node can receive Implicitly enabled echo mode on the associated interface.
<b>Context</b>	<a href="#">bfd subinterface id string minimum-echo-receive-interval number</a>
<b>Tree</b>	<a href="#">minimum-echo-receive-interval</a>
<b>Range</b>	0   250000 to 100000000
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**required-minimum-receive** *number*

<b>Description</b>	The minimum interval between received BFD control packets that this system should support  This value is advertised to the remote peer to indicate the maximum frequency (i.e., minimum inter-packet interval) between BFD control packets that is acceptable to the local system. This value is specified as an integer number of microseconds.
<b>Context</b>	<a href="#">bfd subinterface id</a> <i>string</i> <a href="#">required-minimum-receive</a> <i>number</i>
<b>Tree</b>	<a href="#">required-minimum-receive</a>
<b>Range</b>	10000 to 100000000
<b>Default</b>	1000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-bfd-sessions** *number*

<b>Description</b>	Counter for the total number of BFD sessions
<b>Context</b>	<a href="#">bfd total-bfd-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">total-bfd-sessions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-unmatched-bfd-packets** *number*

<b>Description</b>	Counter for the total number of BFD packets received not matching a BFD session
<b>Context</b>	<a href="#">bfd total-unmatched-bfd-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-unmatched-bfd-packets</a>
<b>Default</b>	0

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L,  
7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250  
IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-  
X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 5 interface

```

interface name string
- adapter
  - model-number string
  - type keyword
  - vendor-manufacture-date string
  - vendor-oui string
  - vendor-part-number string
  - vendor-serial-number string
+ admin-state keyword
+ breakout-mode
  + breakout-port-speed keyword
  + num-breakout-ports keyword
+ description string
+ ethernet
  + aggregate-id reference
  + auto-negotiate boolean
  + dac-link-training boolean
  + duplex-mode keyword
  + flow-control
    + receive boolean
  + forwarding-viable boolean
  + hold-time
    + down number
    - down-expires string
    + up number
    - up-expires string
  - hw-mac-address string
+ l2cp-transparency
  + dot1x
    - oper-rule keyword
    + tunnel boolean
  + efm-oam
    - oper-rule keyword
    + tunnel boolean
  + elmi
    - oper-rule keyword
    + tunnel boolean
  + esmc
    - oper-rule keyword
    + tunnel boolean
  + lacp
    - oper-rule keyword
    + tunnel boolean
  + lldp
    - oper-rule keyword
    + tunnel boolean
  + ptp
    - oper-rule keyword
    + tunnel boolean
  + tunnel-all-l2cp boolean
  + xstp
    - oper-rule keyword
    + tunnel boolean
+ lacp-port-priority number
+ link-loss-forwarding boolean
+ mac-address string

```

```

- physical-medium keyword
+ port-speed keyword
+ ptp-asymmetry number
+ ptp-timestamping
  + disable-ip-timestamping boolean
+ reload-delay number
- reload-delay-expires string
+ standby-signaling keyword
- statistics
  - in-1024b-to-1518b-frames number
  - in-128b-to-255b-frames number
  - in-1519b-or-longer-frames number
  - in-256b-to-511b-frames number
  - in-512b-to-1023b-frames number
  - in-64b-frames number
  - in-65b-to-127b-frames number
  - in-crc-error-frames number
  - in-fragment-frames number
  - in-jabber-frames number
  - in-mac-pause-frames number
  - in-oversize-frames number
  - last-clear string
  - out-1024b-to-1518b-frames number
  - out-128b-to-255b-frames number
  - out-1519b-or-longer-frames number
  - out-256b-to-511b-frames number
  - out-512b-to-1023b-frames number
  - out-64b-frames number
  - out-65b-to-127b-frames number
  - out-mac-pause-frames number
+ storm-control
  + broadcast-rate number
  + multicast-rate number
  - operational-broadcast-rate number
  - operational-multicast-rate number
  - operational-unknown-unicast-rate number
  + rising-threshold-action keyword
  + units keyword
  + unknown-unicast-rate number
+ synce
  + ssm
    + admin-state keyword
- forwarding-complex reference
- forwarding-mode keyword
- ifindex number
+ lag
  + lacp
    + admin-key number
    + interval keyword
    + lacp-mode keyword
    + system-id-mac string
    + system-priority number
  + lacp-fallback-mode keyword
  + lacp-fallback-timeout number
  - lag-speed number
  + lag-type keyword
  - member name reference
    - lacp
      - activity keyword
      - aggregatable boolean
      - collecting boolean
      - distributing boolean
      - lacp-port-priority number
      - oper-key number

```

```

- partner-id string
- partner-key number
- partner-port-num number
- port-num number
- statistics
  - lacp-errors number
  - lacp-in-pkts number
  - lacp-out-pkts number
  - lacp-rx-errors number
  - lacp-tx-errors number
  - lacp-unknown-errors number
- synchronization keyword
- system-id string
- timeout keyword
- last-change string
- microbfd-enabled boolean
- oper-down-reason keyword
- oper-state keyword
+ member-speed keyword
+ min-links number
- last-change string
- linecard reference
+ loopback-mode keyword
+ mtu number
+ num-physical-channels number
- oper-down-reason keyword
- oper-state keyword
+ p4rt
+ id number
- parent-id number
- packet-link-qualification
- result id string
  - end-time string
  - expected-rate number
  - oper-state keyword
  - packets-dropped number
  - packets-error number
  - packets-received number
  - packets-sent number
  - qualification-rate number
  - start-time string
  - status keyword
  - status-message string
- phy-group-members string
- physical-channel reference
+ sflow
+ admin-state keyword
- statistics
  - carrier-transitions number
  - in-broadcast-packets number
  - in-discarded-packets number
  - in-error-packets number
  - in-fcs-error-packets number
  - in-multicast-packets number
  - in-octets number
  - in-packets number
  - in-unicast-packets number
  - last-clear string
  - out-broadcast-packets number
  - out-discarded-packets number
  - out-error-packets number
  - out-mirror-octets number
  - out-mirror-packets number
  - out-multicast-packets number

```

```

- out-octets number
- out-packets number
- out-unicast-packets number
+ subinterface index number
+ admin-state keyword
+ anycast-gw
+ anycast-gw-mac string
- anycast-gw-mac-origin keyword
+ virtual-router-id number
+ bridge-table
+ discard-unknown-src-mac boolean
+ mac-duplication
+ action keyword
- duplicate-entries
- mac address string
- dup-detect-time string
- hold-down-time-remaining (keyword | number)
+ mac-learning
+ admin-state keyword
+ aging
+ admin-state keyword
- learnt-entries
- mac address string
- aging (number | keyword)
- last-update string
+ mac-limit
+ maximum-entries number
+ warning-threshold-pct number
- mac-table
- mac address string
- failed-slots number
- last-update string
- not-programmed-reason keyword
- type keyword
- statistics
- active-entries number
- failed-entries number
- mac-type type keyword
- active-entries number
- failed-entries number
- total-entries number
- total-entries number
+ stp
+ admin-state keyword
+ auto-edge keyword
+ edge-port keyword
+ link-type keyword
+ mst-instance mst-instance number
+ mst-path-cost number
+ mst-port-priority number
+ path-cost number
+ port-number number
+ priority number
+ root-guard keyword
+ collect-detailed-stats boolean
+ collect-irb-stats boolean
+ description string
- ethernet-segment-association
- designated-forwarder boolean
- es-managed boolean
- ethernet-segment string
- ifindex number
+ ip-mtu number
+ ipv4

```

```

+ address ip-prefix string
+ anycast-gw boolean
- origin keyword
+ primary
- status keyword
+ vrrp
+ vrrp-group virtual-router-id number
+ accept-mode boolean
+ admin-state keyword
+ advertise-interval number
+ authentication
+ keychain reference
- current-master (ipv4-address | ipv6-address)
+ init-delay number
+ interface-tracking
+ track-interface interface reference
+ priority-decrement number
- last-transition string
+ master-inherit-interval boolean
- oper-down-reason keyword
- oper-interval number
- oper-state keyword
- operational-priority number
- owner boolean
+ preempt boolean
+ preempt-delay number
+ priority number
- state identityref
+ statistics
- advertisements-discarded-address-mismatch number
- advertisements-discarded-authfail number
- advertisements-discarded-authtype-mismatch number
- advertisements-discarded-interval number
- advertisements-discarded-length number
- advertisements-discarded-total number
- advertisements-discarded-ttl number
- advertisements-discarded-version-mismatch number
- advertisements-interval-error number
- advertisements-received number
- advertisements-sent number
- priority-zero-packets-received number
- priority-zero-packets-sent number
+ version number
+ virtual-address (ipv4-address | ipv6-address)
- virtual-mac string
+ admin-state keyword
+ allow-directed-broadcast boolean
+ arp
+ debug keyword
+ duplicate-address-detection boolean
+ evpn
+ advertise route-type keyword
+ internal-tags
+ set-tag-set reference
+ host-route
+ populate route-type keyword
+ datapath-programming boolean
+ internal-tags
+ set-tag-set reference
+ learn-unsolicited boolean
+ neighbor ipv4-address string
- datapath-programming
- last-failed-complexes string
- status keyword

```

```

- expiration-time string
+ link-layer-address string
- origin keyword
+ proxy-arp boolean
+ timeout number
+ virtual-ipv4-discovery
+ address ipv4-address string
+ allowed-macs string
+ probe-bridged-subinterfaces string
+ probe-interval number
- statistics
- out-probe-packets number
- statistics
- out-total-probe-packets number
+ dhcp-client
+ trace-options
+ trace keyword
+ dhcp-relay
+ admin-state keyword
- dns-resolution
- server domain string
- last-update string
- resolved-ip-address (ipv4-address | ipv6-address)
+ gi-address string
+ network-instance reference
- oper-down-reason keyword
- oper-state keyword
+ option keyword
+ server (ipv4-address | domain-name)
- statistics
- client-packets-discarded number
- client-packets-received number
- client-packets-relayed number
- server-packets-discarded number
- server-packets-received number
- server-packets-relayed number
+ trace-options
+ trace keyword
+ use-gi-addr-as-src-ip-addr boolean
+ dhcp-server
+ admin-state keyword
- oper-state keyword
- statistics
- in-discarded-packets number
- in-error-packets number
- in-forwarded-octets number
- in-forwarded-packets number
- in-matched-ra-packets number
- in-octets number
- in-packets number
- in-terminated-octets number
- in-terminated-packets number
- last-clear string
- out-discarded-packets number
- out-error-packets number
- out-forwarded-octets number
- out-forwarded-packets number
- out-octets number
- out-originated-octets number
- out-originated-packets number
- out-packets number
+ ipv6
+ address ip-prefix string
+ anycast-gw boolean

```



```

- origin keyword
+ primary
- status keyword
+ type keyword
+ vrrp
+ vrrp-group virtual-router-id number
+ accept-mode boolean
+ admin-state keyword
+ advertise-interval number
+ authentication
+ keychain reference
- current-master (ipv4-address | ipv6-address)
+ init-delay number
+ interface-tracking
+ track-interface interface reference
+ priority-decrement number
- last-transition string
+ master-inherit-interval boolean
- oper-down-reason keyword
- oper-interval number
- oper-state keyword
- operational-priority number
- owner boolean
+ preempt boolean
+ preempt-delay number
+ priority number
- state identityref
+ statistics
- advertisements-discarded-address-mismatch number
- advertisements-discarded-authfail number
- advertisements-discarded-authtype-mismatch number
- advertisements-discarded-interval number
- advertisements-discarded-length number
- advertisements-discarded-total number
- advertisements-discarded-ttl number
- advertisements-discarded-version-mismatch number
- advertisements-interval-error number
- advertisements-received number
- advertisements-sent number
- priority-zero-packets-received number
- priority-zero-packets-sent number
+ version number
+ virtual-address string
- virtual-link-local-address string
- virtual-mac string
+ admin-state keyword
+ dhcp-client
+ trace-options
+ trace keyword
+ dhcp-relay
+ admin-state keyword
- dns-resolution
- server domain string
- last-update string
- resolved-ip-address (ipv4-address | ipv6-address)
+ network-instance reference
- oper-down-reason keyword
- oper-state keyword
+ option keyword
+ server (ipv6-address | domain-name)
+ source-address string
- statistics
- client-packets-discarded number
- client-packets-received number

```

```

- client-packets-relayed number
- server-packets-discarded number
- server-packets-received number
- server-packets-relayed number
+ trace-options
+ trace keyword
+ dhcpv6-server
+ admin-state keyword
- oper-state keyword
+ neighbor-discovery
+ debug keyword
+ duplicate-address-detection boolean
+ evpn
+ advertise route-type keyword
+ internal-tags
+ set-tag-set reference
+ host-route
+ populate route-type keyword
+ datapath-programming boolean
+ internal-tags
+ set-tag-set reference
+ learn-unsolicited keyword
+ limit
+ log-only boolean
+ max-entries number
+ warning-threshold-pct number
+ neighbor ipv6-address string
- current-state keyword
- datapath-programming
- last-failed-complexes string
- status keyword
- is-router boolean
+ link-layer-address string
- next-state-time string
- origin keyword
+ proxy-nd boolean
+ reachable-time number
+ stale-time number
+ virtual-ipv6-discovery
+ address ipv6-address string
+ allowed-macs string
+ probe-bridged-subinterfaces string
+ probe-interval number
- statistics
- out-probe-packets number
- statistics
- out-total-probe-packets number
+ router-advertisement
+ debug keyword
+ router-role
+ admin-state keyword
+ current-hop-limit number
+ ip-mtu number
+ managed-configuration-flag boolean
+ max-advertisement-interval number
+ min-advertisement-interval number
+ other-configuration-flag boolean
+ prefix ipv6-prefix string
+ autonomous-flag boolean
+ on-link-flag boolean
+ preferred-lifetime (keyword | number)
+ valid-lifetime (keyword | number)
+ reachable-time number
+ retransmit-time number

```

```

    + router-lifetime number
  - statistics
    - in-discarded-packets number
    - in-error-packets number
    - in-forwarded-octets number
    - in-forwarded-packets number
    - in-matched-ra-packets number
    - in-octets number
    - in-packets number
    - in-terminated-octets number
    - in-terminated-packets number
    - last-clear string
    - out-discarded-packets number
    - out-error-packets number
    - out-forwarded-octets number
    - out-forwarded-packets number
    - out-octets number
    - out-originated-octets number
    - out-originated-packets number
    - out-packets number
+ l2-mtu number
- last-change string
+ local-mirror-destination
+ admin-state keyword
- oper-state keyword
- mpls
  - statistics
    - in-discarded-packets number
    - in-error-packets number
    - in-forwarded-octets number
    - in-forwarded-packets number
    - in-matched-ra-packets number
    - in-octets number
    - in-packets number
    - in-terminated-octets number
    - in-terminated-packets number
    - last-clear string
    - out-discarded-packets number
    - out-error-packets number
    - out-forwarded-octets number
    - out-forwarded-packets number
    - out-octets number
    - out-originated-octets number
    - out-originated-packets number
    - out-packets number
+ mpls-mtu number
- name string
- oper-down-reason keyword
- oper-state keyword
+ ra-guard
+ policy reference
+ vlan-list vlan-id number
- statistics
  - in-discarded-packets number
  - in-error-packets number
  - in-forwarded-octets number
  - in-forwarded-packets number
  - in-matched-ra-packets number
  - in-octets number
  - in-packets number
  - in-terminated-octets number
  - in-terminated-packets number
  - last-clear string
  - out-discarded-packets number

```

```

- out-error-packets number
- out-forwarded-octets number
- out-forwarded-packets number
- out-octets number
- out-originated-octets number
- out-originated-packets number
- out-packets number
+ type identityref
+ unidirectional-link-delay
- last-reported-dynamic-delay (number | keyword)
+ static-delay (number | keyword)
+ vlan
+ encap
+ double-tagged
+ inner-vlan-id (number | keyword)
+ outer-vlan-id (number | keyword)
+ single-tagged
+ vlan-id (number | keyword)
+ single-tagged-range
+ low-vlan-id range-low-vlan-id number
+ high-vlan-id number
+ untagged
+ tpid identityref
- traffic-rate
- in-bps number
- out-bps number
+ transceiver
- channel index number
- input-power
- high-alarm-condition boolean
- high-alarm-threshold decimal-number
- high-warning-condition boolean
- high-warning-threshold decimal-number
- latest-value decimal-number
- low-alarm-condition boolean
- low-alarm-threshold decimal-number
- low-warning-condition boolean
- low-warning-threshold decimal-number
- laser-bias-current
- high-alarm-condition boolean
- high-alarm-threshold decimal-number
- high-warning-condition boolean
- high-warning-threshold decimal-number
- latest-value decimal-number
- low-alarm-condition boolean
- low-alarm-threshold decimal-number
- low-warning-condition boolean
- low-warning-threshold decimal-number
- output-power
- high-alarm-condition boolean
- high-alarm-threshold decimal-number
- high-warning-condition boolean
- high-warning-threshold decimal-number
- latest-value decimal-number
- low-alarm-condition boolean
- low-alarm-threshold decimal-number
- low-warning-condition boolean
- low-warning-threshold decimal-number
- wavelength decimal-number
- connector-type keyword
- date-code string
+ ddm-events boolean
- ethernet-pmd string
- fault-condition boolean

```

```

- form-factor keyword
+ forward-error-correction keyword
- healthz
  - last-unhealthy string
  - status keyword
  - unhealthy-count number
- input-power
  - high-alarm-condition boolean
  - high-alarm-threshold decimal-number
  - high-warning-condition boolean
  - high-warning-threshold decimal-number
  - latest-value decimal-number
  - low-alarm-condition boolean
  - low-alarm-threshold decimal-number
  - low-warning-condition boolean
  - low-warning-threshold decimal-number
- laser-bias-current
  - high-alarm-condition boolean
  - high-alarm-threshold decimal-number
  - high-warning-condition boolean
  - high-warning-threshold decimal-number
  - latest-value decimal-number
  - low-alarm-condition boolean
  - low-alarm-threshold decimal-number
  - low-warning-condition boolean
  - low-warning-threshold decimal-number
- oper-down-reason keyword
- oper-state keyword
- output-power
  - high-alarm-condition boolean
  - high-alarm-threshold decimal-number
  - high-warning-condition boolean
  - high-warning-threshold decimal-number
  - latest-value decimal-number
  - low-alarm-condition boolean
  - low-alarm-threshold decimal-number
  - low-warning-condition boolean
  - low-warning-threshold decimal-number
- serial-number string
- temperature
  - high-alarm-condition boolean
  - high-alarm-threshold number
  - high-warning-condition boolean
  - high-warning-threshold number
  - latest-value number
  - low-alarm-condition boolean
  - low-alarm-threshold number
  - low-warning-condition boolean
  - low-warning-threshold number
  - maximum number
  - maximum-time string
+ tx-laser boolean
- vendor string
- vendor-lot-number string
- vendor-part-number string
- vendor-revision string
- voltage
  - high-alarm-condition boolean
  - high-alarm-threshold decimal-number
  - high-warning-condition boolean
  - high-warning-threshold decimal-number
  - latest-value decimal-number
  - low-alarm-condition boolean
  - low-alarm-threshold decimal-number

```

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```
- low-warning-condition boolean  
- low-warning-threshold decimal-number  
- wavelength decimal-number  
+ vlan-tagging boolean
```

## 5.1 interface Descriptions

### interface `name string`

<b>Description</b>	The list of named interfaces on the device
<b>Context</b>	<code>interface name string</code>
<b>Tree</b>	<code>interface</code>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name `string`

<b>Description</b>	<p>The name of the interface</p> <p>Valid options are: irb&lt;N&gt;, N=0..255 lif-&lt;lif_name&gt; enp&lt;bus&gt;s&lt;dev&gt;f&lt;fn&gt;, bus=0..255, dev=0..31, fn=0..7 vhn-&lt;vhn_name&gt; lag&lt;N&gt;, N=1..1000 [note1] lo&lt;N&gt;, N=0..255 mgmt0 mgmt0-standby ethernet-&lt;slot&gt;/&lt;port&gt; ethernet-&lt;slot&gt;/&lt;mda&gt;/&lt;port&gt; system0 sync0</p> <p>&lt;lif_name&gt;=Linux interface name &lt;vhn_name&gt;=vhost interface name &lt;slot&gt;=slot number {1,2,3,..} &lt;mda&gt;=mda id {a,b,c,d,e,f} &lt;port&gt;=port id {1,2,3,..}</p> <p>[note1] The maximum number of LAGs per platform is as follows: D1: 32 (N must be 1..32) D2-D3: 128 (N must be 1..1000) D4-D5: 64 (N must be 1..64) H2-H3: 127 (N must be 1..127) H4: 255 (N must be 1..255) IXR: 128 (N must be 1..128) SXR-1d-32D: 128 (N must be 1..128) SXR-1x-44S: 128 (N must be 1..128) A1: 10 (N must be 1..10) IXR-X1b: 512 (N must be 1..512) IXR-X3b: 512 (N must be 1..512)</p>
<b>Context</b>	<code>interface name string</code>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### adapter

<b>Description</b>	State for adapters
<b>Context</b>	<code>interface name string adapter</code>
<b>Tree</b>	<code>adapter</code>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **model-number** *string*

**Description** Model information for the adapter  
This is the information as read from the EEPROM of the part. The string is expected to contain printable ASCII characters, but unprintable ASCII characters read from the EEPROM are not filtered out.

**Context** [interface name](#) *string* [adapter](#) [model-number](#) *string*

**Tree** [model-number](#)

**Configurable** False

**Platforms** Supported on all platforms

### **type** *keyword*

**Description** Type of adapter for the port

**Context** [interface name](#) *string* [adapter](#) [type](#) *keyword*

**Tree** [type](#)

**Options**

- unknown
- qsfp28-to-sfp+/sfp28
- cfp-to-qsfp28

**Configurable** False

**Platforms** Supported on all platforms

### **vendor-manufacture-date** *string*

**Description** Vendor's date code.  
This is the information as read from the EEPROM of the part.

**Context** [interface name](#) *string* [adapter](#) [vendor-manufacture-date](#) *string*

**Tree** [vendor-manufacture-date](#)

**Configurable** False

**Platforms** Supported on all platforms

### **vendor-oui** *string*

**Description** Vendor's OUI which contains the IEEE company identifier for the vendor



This is the information as read from the EEPROM of the part. A value of all zero indicates that the vendor OUI is unspecified.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">adapter</a> <a href="#">vendor-oui</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-oui</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **vendor-part-number** *string*

<b>Description</b>	Vendor's part number or product name of the adapter  This is the information as read from the EEPROM of the part. An empty string indicates the vendor part number is unspecified. The string is expected to contain printable ASCII characters, but unprintable ASCII characters read from the EEPROM are not filtered out.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">adapter</a> <a href="#">vendor-part-number</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **vendor-serial-number** *string*

<b>Description</b>	Vendor's serial number of the adapter  This is the information as read from the EEPROM of the part. An empty string indicates the vendor serial number is unspecified. The string is expected to contain printable ASCII characters, but unprintable ASCII characters read from the EEPROM are not filtered out.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">adapter</a> <a href="#">vendor-serial-number</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	The configured, desired state of the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable

<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## breakout-mode

<b>Description</b>	<p>Configuration of breakout options.</p> <p>7220 D3 ports 3-33: 4x10G and 4x25G</p> <p>7220 D3L ports 1-31: 2x50G, 4x10G and 4x25G</p> <p>7220 H3 ports 3-34: 4x10G, 2x100G/4x100G, and 2x200G</p> <p>7220 H4 ports 1-64: 4x100G and 2x200G</p> <p>7220 D4 ports 29-32: 4x100G, 4x25G, and 4x10G</p> <p>7220 D4 ports 9, 23-27: 4x25G and 4x10G</p> <p>7220 D5 ports 1-32: 4x10G, 4x25G, 2x100G/4x100G, and 2x200G</p> <p>7730 SXR-1d-32D QSFP28 ports 1-16, 21-32: 4x10G and 4x25G (Note 3)</p> <p>7730 SXR-1d-32D QSFPDD ports 17-20: 4x100G, 3x100G (Note 1), 4x25G, and 4x10G</p> <p>7730 SXR-1x-44S SFPDD ports 1-20, 23-42: No breakouts</p> <p>7730 SXR-1x-44S QSFPDD ports 21,22,43,44: 4x100G, 3x100G (Note 1), 4x25G, and 4x10G</p> <p>7250 IXR-6e/10e 60p QSFP28 IMM 9,12,15,18,21,24,26,27,29,30,32,35,38,39,41,42,45,48: 4x25G and 4x10G (Note 2)</p> <p>7250 IXR-6e/10e 36p QSFPDD IMM all ports: 4x100G, 2x100G, 4x25G, and 4x10G</p> <p>7250 IXR-X1b QSFP28 ports 1-24: 4x25G, and 4x10G (Note 4)</p> <p>7250 IXR-X1b QSFPDD ports 25-36: 4x100G, 3x100G (Note 1), 2x100G, 4x25G, and 4x10G</p> <p>7250 IXR-X3b QSFPDD all ports: 4x100G, 3x100G (Note 1), 2x100G, 4x25G, and 4x10G</p> <p>Note 1: 3x100G is only supported for Digital Coherent Optic transceivers</p> <p>Note 2: For the following port groupings only the higher numbered port supports breakout-mode. If the higher numbered port is to be configured for breakout-mode, then the lower numbered port should not be configured. If both ports are configured, then the lower numbered port takes precedence and the higher numbered port shall be operationally down with reason unsupported-breakout-port. Groupings are (8,9), (11,12), (14,15), (17,18), (20,21), (23,24), (44, 45), (47,48).</p>
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Note 3: Breakout and 40G is only supported on odd numbered ports. For the QSFP28 four port groupings [1-4], [5-8], [9-12], [13-16], [21-24], [25-28], and [29-32] if either of the odd numbered ports within a group is configured for 40G, 4x10G, or 4x25G, then the other odd numbered port in the same group may only be configured if it is configured for one of 40G, 4x10G, or 4x25G (can differ between the odd ports) and neither of the two even numbered ports within the same group can be configured.

Note 4: For the QSFP28 ports, the following port groups exist [n, n+1, n+2, n+3] for n = 1, 5, 9, 13, 17, 21. Breakout for 4x25G or 4x10G is only supported on ports n+1 and n+3. When initially configuring a port with a breakout configuration or port speed that does not already exist on another configured port within the same group, then a link flap and traffic hit may occur on other ports within the same group. When the breakout configuration or port speed is changed for a port in a group, then a link flap and traffic hit may occur on other ports within the same group. If port n+1 within the group is configured for breakout, then port n cannot be configured. In addition if port n+1 is configured for breakout and port n+3 is configured without breakout, then port n+2 may only be configured with the same speed as port n+3. If port n+3 within the group is configured for breakout, then port n+2 cannot be configured. In addition if port n+3 is configured for breakout and port n+1 is configured without breakout, then port n may only be configured with the same speed as port n+1.

Port Groups and auto-configuration of port speed: Manually configured breakout-mode takes precedence over the auto-configured port-speed. This means that configuring a port within a port-group can have a side effect to take down an operational port that had its speed set based on the auto configuration feature. If there is risk of mixing transceiver types within a port group, then it is recommended to always manually configure the ports

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">breakout-mode</a>
<b>Tree</b>	<a href="#">breakout-mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **breakout-port-speed** *keyword*

<b>Description</b>	The speed of each breakout port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">breakout-mode</a> <a href="#">breakout-port-speed</a> <i>keyword</i>
<b>Tree</b>	<a href="#">breakout-port-speed</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 10G</li> <li>• 25G</li> <li>• 50G</li> <li>• 100G</li> </ul>

	<ul style="list-style-type: none"> <li>• 200G</li> <li>• 400G</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-breakout-ports *keyword*

<b>Description</b>	The number of breakout ports supported by this connector
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">breakout-mode</a> <a href="#">num-breakout-ports</a> <i>keyword</i>
<b>Tree</b>	<a href="#">num-breakout-ports</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 8</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	A user-configured description of the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ethernet

<b>Description</b>	Enter the ethernet context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a>
<b>Tree</b>	<a href="#">ethernet</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### aggregate-id *reference*

<b>Description</b>	lag interface with which this interface is associated
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet aggregate-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">aggregate-id</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### auto-negotiate *boolean*

<b>Description</b>	When set to true the interface uses auto-negotiation for speed, duplex and flow-control settings.  When set to false, the transmission parameters are specified manually.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet auto-negotiate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">auto-negotiate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1

### dac-link-training *boolean*

<b>Description</b>	If the system detects that the transceiver is connected to a DAC cable then a true setting enables link training for better link stability. The link training setting must be the same at both ends of the DAC cable or else the link may not come up.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet dac-link-training</a> <i>boolean</i>
<b>Tree</b>	<a href="#">dac-link-training</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H3, 7220 IXR-H4

**duplex-mode** *keyword*

<b>Description</b>	When auto-negotiate is true, this sets the duplex mode that will be advertised to the peer. When auto-negotiate is false, this directly sets the duplex mode of the interface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet duplex-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">duplex-mode</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• full</li><li>• half</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1

**flow-control**

<b>Description</b>	Enter the flow-control context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet flow-control</a>
<b>Tree</b>	<a href="#">flow-control</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**receive** *boolean*

<b>Description</b>	<p>When this is true PAUSE frames received on this interface are accepted and processed, and, if auto-negotiation is enabled it also causes the capability to receive PAUSE frames to be signaled to the peer (applicable only to ports 1-48 of the 7220 IXR-D1 and to mgmt0 and mgmt0-standby ports).</p> <p>When this is false PAUSE frames received on this interface are ignored, and, if auto-negotiation is enabled it causes the capability to receive PAUSE frames to be signaled to the peer as non-support (applicable only to ports 1-48 of the 7220 IXR-D1 and to mgmt0 and mgmt0-standby ports)</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet flow-control receive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**forwarding-viable** *boolean*

<b>Description</b>	<p>If true: this LAG member link should be used for the transmission of traffic if all other LAG/port attributes allow it.</p> <p>If false: this LAG member link should not be used for the transmission of traffic.</p> <p>In all cases: This LAG member link should process any received frames when it is an active member link. L2 protocols such as LLDP, LACP and micro-BFD should continue to be sent and processed.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet forwarding-viable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">forwarding-viable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**hold-time**

<b>Description</b>	Configure interface hold timers for Ethernet interfaces
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hold-time</a>
<b>Tree</b>	<a href="#">hold-time</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**down** *number*

<b>Description</b>	<p>Holds link down events for the configured time</p> <p>The hold-time down behavior is triggered with events that try to bring the ethernet interface down and can change quickly. It is not triggered with an admin-state disable event or interface disable due to other internal reasons (such as fabric unavailability). When running, the interface will not be brought down till the timer expires. The typical use of the hold-time down is to provide stability and avoid the protocols to advertise/withdraw messages if there are flapping optics. The hold-time down is aborted if the user does admin-state disable or if the interface is disabled due to other internal reasons that prevent the traffic to be forwarded on the interface.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hold-time down</a> <i>number</i>
<b>Tree</b>	<a href="#">down</a>
<b>Range</b>	0   100 to 86400000

<b>Default</b>	0
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **down-expires** *string*

<b>Description</b>	The remaining time until the hold-time down expires and the interface goes operationally down.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hold-time down-expires</a> <i>string</i>
<b>Tree</b>	<a href="#">down-expires</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **up** *number*

<b>Description</b>	<p>Holds link up events for the configured time</p> <p>The hold-time up behavior is triggered with any event that tries to bring up the ethernet interface (interface admin-state enable, a reboot, etc). While the hold-time up is running, the transceiver laser will be enabled, however the higher layers will not be notified that the interface is operationally up until the timer expires.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hold-time up</a> <i>number</i>
<b>Tree</b>	<a href="#">up</a>
<b>Range</b>	0   100 to 86400000
<b>Default</b>	0
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **up-expires** *string*

<b>Description</b>	The remaining time until the hold-time up expires and the interface comes up.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hold-time up-expires</a> <i>string</i>
<b>Tree</b>	<a href="#">up-expires</a>



<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### hw-mac-address *string*

<b>Description</b>	The MAC address associated with the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet hw-mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">hw-mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### l2cp-transparency

<b>Description</b>	Configuration and state of the Layer-2 Control Protocol transparency
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency</a>
<b>Tree</b>	<a href="#">l2cp-transparency</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dot1x

<b>Description</b>	Container for the configuration of 802.1x Port based Network Access Control.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency dot1x</a>
<b>Tree</b>	<a href="#">dot1x</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-rule *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress dot1x frames.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency dot1x oper-rule</a> <i>keyword</i>

<b>Tree</b>	<a href="#">oper-rule</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• trap-to-cpu-untagged</li> <li>• drop-tagged-and-untagged</li> <li>• tunnel-tagged-and-untagged</li> <li>• tunnel-tagged-drop-untagged</li> <li>• tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel *boolean*

<b>Description</b>	Configures if incoming dot1x frames are tunneled. Dot1x frames are identified by MAC DA 01-80-c2-00-00-03 and Ethertype 0x888e.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">l2cp-transparency</a> <a href="#">dot1x</a> <a href="#">tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### efm-oam

<b>Description</b>	Container for the configuration of Ethernet in the First Mile OAM frames
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">l2cp-transparency</a> <a href="#">efm-oam</a>
<b>Tree</b>	<a href="#">efm-oam</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-rule *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress EFM-OAM frames.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">l2cp-transparency</a> <a href="#">efm-oam</a> <a href="#">oper-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-rule</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• trap-to-cpu-untagged</li> <li>• drop-tagged-and-untagged</li> <li>• tunnel-tagged-and-untagged</li> <li>• tunnel-tagged-drop-untagged</li> <li>• tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel *boolean*

<b>Description</b>	Configures if incoming EFM-OAM frames are tunneled EFM-OAM frames are identified by Ethertype 0x8809 and slow protocol subtype 0x03.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency efm-oam tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### elmi

<b>Description</b>	Container for the configuration of Ethernet local management interface frames
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency elmi</a>
<b>Tree</b>	<a href="#">elmi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-rule *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress ELMF frames
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency elmi oper-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-rule</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• trap-to-cpu-untagged</li> <li>• drop-tagged-and-untagged</li> <li>• tunnel-tagged-and-untagged</li> </ul>

	<ul style="list-style-type: none"> <li>tunnel-tagged-drop-untagged</li> <li>tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel *boolean*

<b>Description</b>	Configures if incoming ELMI frames are tunneled ELMI frames are identified by MAC DA 01-80-C2-00-00-07 and Ethertype 0x88ee.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency elmi tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### esmc

<b>Description</b>	Container for the configuration of Ethernet synchronization messaging channel frames
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency esmc</a>
<b>Tree</b>	<a href="#">esmc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-rule *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress ESMC frames
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency esmc oper-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-rule</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>trap-to-cpu-untagged</li> <li>drop-tagged-and-untagged</li> <li>tunnel-tagged-and-untagged</li> <li>tunnel-tagged-drop-untagged</li> <li>tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel *boolean*

**Description** Configures if incoming esmc frames are tunneled  
ESMC frames are identified by Ethertype 0x8809 and slow protocol subtype 0x0A.

**Context** [interface name](#) *string* [ethernet](#) [l2cp-transparency](#) [esmc](#) [tunnel](#) *boolean*

**Tree** [tunnel](#)

**Default** false

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lACP

**Description** Container for L2CP transparency of the Link Aggregation Control Protocol

**Context** [interface name](#) *string* [ethernet](#) [l2cp-transparency](#) [lACP](#)

**Tree** [lACP](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-rule *keyword*

**Description** The operational state of the TCAM rule applied to ingress LACP frames.

**Context** [interface name](#) *string* [ethernet](#) [l2cp-transparency](#) [lACP](#) [oper-rule](#) *keyword*

**Tree** [oper-rule](#)

**Options**

- trap-to-cpu-untagged
- drop-tagged-and-untagged
- tunnel-tagged-and-untagged
- tunnel-tagged-drop-untagged
- tunnel-tagged-trap-to-cpu-untagged

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel** *boolean*

<b>Description</b>	Configures if incoming LACP frames are tunneled. LACP frames are identified by MAC DA 01-80-c2-00-00-02, Ethertype 0x8809 and slow-protocol sub-type 0x01.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency lACP tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lldp**

<b>Description</b>	Container for L2CP transparency of the Link Layer Discovery Protocol
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency lldp</a>
<b>Tree</b>	<a href="#">lldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-rule** *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress LLDP frames.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency lldp oper-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-rule</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• trap-to-cpu-untagged</li> <li>• drop-tagged-and-untagged</li> <li>• tunnel-tagged-and-untagged</li> <li>• tunnel-tagged-drop-untagged</li> <li>• tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel** *boolean*

<b>Description</b>	Configures if incoming LLDP frames are tunneled. LLDP frames are identified by MAC DA 01-80-c2-00-00-00 and Ethertype 0x88cc.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency lldp tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ptp**

<b>Description</b>	Container for the configuration of Precision Time Protocol Peer-Delay frames.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-rule** *keyword*

<b>Description</b>	The operational state of the TCAM rule applied to ingress ptp frames.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency ptp oper-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-rule</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• trap-to-cpu-untagged</li> <li>• drop-tagged-and-untagged</li> <li>• tunnel-tagged-and-untagged</li> <li>• tunnel-tagged-drop-untagged</li> <li>• tunnel-tagged-trap-to-cpu-untagged</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel** *boolean*

<b>Description</b>	Configures if incoming ptp frames are tunneled. ptp frames are identified by MAC DA 01-80-c2-00-00-0e and Ethertype 0x88f7.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency ptp tunnel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-all-l2cp** *boolean*

<b>Description</b>	Configures the tunneling of all the L2CP protocols. When set to true this command triggers the installation of an ingress TCAM rule with the highest priority (above all the individual L2CP tunnel rules) which allows the forwarding of any Layer-2 Control Protocol coming into the interface. All the L2CP frames identified by MAC DA = 01:80:c2:00:00:0x or MAC DA = 01:80:c2:00:00:2x, with 'x' being any hex value, are tunneled. When set to false, all L2CP frames without a specific L2CP tunnel rule are discarded.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency tunnel-all-l2cp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tunnel-all-l2cp</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**xstp**

<b>Description</b>	Container for the configuration of all the Spanning Tree Protocols. It includes Spanning Tree Protocol (STP), Rapid RSTP (RSTP) and Multiple STP (MSTP)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet l2cp-transparency xstp</a>
<b>Tree</b>	<a href="#">xstp</a>
<b>Configurable</b>	True



**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-rule** *keyword*

**Description** The operational state of the TCAM rule applied to ingress xSTP frames.

**Context** [interface name](#) *string* [ethernet l2cp-transparency xstp oper-rule](#) *keyword*

**Tree** [oper-rule](#)

**Options**

- trap-to-cpu-untagged
- drop-tagged-and-untagged
- tunnel-tagged-and-untagged
- tunnel-tagged-drop-untagged
- tunnel-tagged-trap-to-cpu-untagged

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tunnel** *boolean*

**Description** Configures if incoming xSTP frames are tunneled.  
xSTP frames are identified by MAC DA 01-80-c2-00-00-00 and any Ethertype.

**Context** [interface name](#) *string* [ethernet l2cp-transparency xstp tunnel](#) *boolean*

**Tree** [tunnel](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lACP-port-priority** *number*

**Description** Configure the port priority for LACP. This value is used to determine which port should be activated with LACP fallback mode. Lower values are more preferred.

**Context** [interface name](#) *string* [ethernet lACP-port-priority](#) *number*

<b>Tree</b>	<a href="#">lacp-port-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-loss-forwarding *boolean*

<b>Description</b>	Indicates whether link-loss-forwarding is enabled in the interface  When enabled, faults can be propagated to the devices connected to this interface. It is supported on interfaces with a single non-tagged subinterface that is associated to a network-instance of type vpws. On VPWS services, the propagation of faults from a connection-point to the opposite connection-point is known as Link Loss Forwarding and requires setting this command to true and the standby-signaling command to the type of propagation signaling to be used with the connected Customer Equipment.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet link-loss-forwarding</a> <i>boolean</i>
<b>Tree</b>	<a href="#">link-loss-forwarding</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-address *string*

<b>Description</b>	MAC address of the interface  If not configured, this is set to the hw-mac-address, which is populated depending on interface type:  When deleted, will revert back to the value of hw-mac-address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### physical-medium *keyword*

<b>Description</b>	Indicates the PHY supported by the RJ45 port.  If the port is supported by a SFP, QSFP+, QSFP28 or QSFP-DD transceiver no value is populated in this leaf.
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<b>Context</b>	<code>interface name</code> <i>string</i> <code>ethernet physical-medium</code> <i>keyword</i>
<b>Tree</b>	<code>physical-medium</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1000BASE-T</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **port-speed** *keyword*

<b>Description</b>	<p>The speed of the port or channel</p> <p>If this parameter is configured, then the configured value will be applied. If it is not configured, then there are two mechanisms that will set a speed for the port.</p> <p>Some platforms support a mechanism to automatically set the port-speed based on the form factor of the inserted transceiver.</p> <p>form-factor speed</p> <p>QSFP28 100G</p> <p>SFP112 100G</p> <p>SFP56-DD 100G</p> <p>SFP 1G SFP+ 10G</p> <p>QSFP56-DD 400G</p> <p>QSFP56 200G</p> <p>QSFP28-DD 200G</p> <p>SFP28 25G</p> <p>QSFP112 400G</p> <p>QSFP+ 40G</p> <p>QSFP28-50G 50G</p> <p>SFP56 50G</p> <p>QSFP112-DD 800G</p> <p>CFP2-DCO 400G</p> <p>When the auto-configuration of speed based on form factor is not supported and the speed is not configured, then the default speed of a port (when auto-negotiation is disabled or unsupported) depends on the platform and port/connector number as follows:</p> <p>mgmt0 and mgmt0-standby ports: 1G</p> <p>J2 IMM ports 1-32: 100G</p> <p>J2 IMM ports 33-36: 100G</p> <p>7215 IXS-A1 ports 1-48: 1G</p> <p>7215 IXS-A1 ports 49-52: 10G</p>
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7220-D1 ports 1-48: 1G  
7220-D1 ports 49-52: 10G  
7220-D2/D2L ports 1-48: 25G  
7220-D2/D2L ports 49-56: 100G  
7220-D2L ports 57-58: 10G  
7220-D3 ports 1-2: 10G  
7220-D3 ethernet-1/[3-34]: 100G  
7220-D3 ethernet-1/[3-33]/n: 25G  
7220-D3L ethernet-1/[1-32]: 100G  
7220-D3L ethernet-1/[1-31]/n: 25G  
7220-D3L ports 33-34: 10G  
7220-D4 ports 1-28: 100G  
7220-D4 ports 29-36: 400G  
7220-D5 ports 1-32: 400G  
7220-D5 ports 33-38: 10G  
7220-H2 ports 1-128: 100G  
7220-H3 ports 1-2: 10G  
7220-H3 ports 3-34: 400G  
7220-H4 ports 1-64: 400G  
7220-H4 ports 65-66: 10G  
7250 IXR-6e/10e 60p QSFP28 IMM all ports: 100G  
7250 IXR-6e/10e 36p QSFPDD-400 IMM all ports: 400G  
7250 IXR-X1b QSFP28 ports 1-24: 100G  
7250 IXR-X1b QSFPDD ports 25-36: 400G  
7250 IXR-X3b QSFPDD all ports: 400G  
7730 SXR-1d-32D QSFP28 ports 1-16,21-32: 100G  
7730 SXR-1d-32D QSFPDD ports 17-20: 400G  
7730 SXR-1x-44S SFPDD ports 1-20, 23-42: 100G  
7730 SXR-1x-44S QSFPDD ports 21,22,43,44: 400G  
Supported speeds:  
mgmt0 and mgmt0-standby ports: 1G  
J2 IMM ports 1-32: 40G, 100G (Note 1)  
J2 IMM ports 33-36: 40G, 100G, 400G  
7215 IXS-A1 ports 1-48: 10M, 100M, 1G  
7215 IXS-A1 ports 49-52: 1G, 10G  
7220-D1 ports 1-48: 10M, 100M, 1G

7220-D1 ports 49-52: 10G  
7220-D2/D2L ports 1-48: 1G, 10G, 25G (Note 2)  
7220-D2 ports 49-56: 10G, 25G, 40G, 100G  
7220-D2L ports 49-56: 10G, 25G, 40G, 100G  
7220-D2L ports 57-58: 10G  
7220-D3 ports 1-2: 10G  
7220-D3 ethernet-1/[3-34]: 10G, 25G, 40G, 50G, 100G  
7220-D3 ethernet-1/[3-33]/n: 10G, 25G  
7220-D3L ethernet-1/[1-32]: 10G, 25G, 40G, 50G, 100G  
7220-D3L ethernet-1/[1-31]/n: 10G, 25G  
7220-D3L ports 33-34: 10G  
7220-D4 ports 1-8: 40G, 100G  
7220-D4 ports 9-28: 10G, 25G, 40G, 100G  
7220-D4 ports 29-36: 10G, 25G, 40G, 100G, 400G  
7220-D5 ports 1-32: 40G, 100G, 400G  
7220-D5 ports 33-38: 10G  
7220-H2 ports 1-128: 100G  
7220-H3 ports 1-2: 10G  
7220-H3 ports 3-34: 40G, 100G, 200G, 400G  
7220-H4 ports 1-64: 40G, 100G, 200G, 400G  
7220-H4 ports 65-66: 10G  
7250 IXR-6e/10e 60p QSFP28 IMM all ports: 100G  
7250 IXR-6e/10e 36p QSFPDD-400 IMM all ports: 40G, 100G, 400G  
7250 IXR-X1b QSFP28 ports 1-24: 40G, 100G (Note 4)  
7250 IXR-X1b QSFPDD ports 25-36: 40G, 100G, 400G  
7250 IXR-X3b QSFPDD all ports: 40G, 50G, 100G, 400G  
7730 SXR-1d-32D QSFP28 ports 1-16,21-32: 40G, 100G (Note 3)  
7730 SXR-1d-32D QSFPDD ports 17-20: 40G, 100G, 400G  
7730 SXR-1x-44S SFPDD ports 1-20, 23-42: 10G, 25G, 100G  
7730 SXR-1x-44S QSFPDD ports 21,22,43,44: 40G, 100G, 400G

Note 1: Ports 9-12 cannot operate at different port speeds (some at 40G and others at 100G). The required speed of ports 9-12 is based on the port-speed of the first configured port in this block; if any subsequent port in the block is configured with a different port speed that port will not come up.

Note 2: On 7220-D2: if one port in each consecutive group of 4 ports (1-4, 5-8, .. , 45-48) is enabled and has a configured speed of 25G then the other 3 ports may only be enabled if they also have a configured speed of 25G or no speed configured; if one port in each consecutive group of 4 ports (1-

4, 5-8, .. , 45-48) is enabled and has a configured speed of 1G or 10G the other 3 ports may only be enabled if they also have a configured speed of 1G or 10G or no speed configured. On 7220-D2L: if one port in each port group of 4 ports ({1, 2, 3, 6}, {4, 5, 7, 9}, {8, 10, 11, 12}, {13, 14, 15, 18}, {16, 17, 19, 21}, {20, 22, 23, 24}, {25, 26, 27, 30}, {28, 29, 31, 33}, {32, 34, 35, 36}, {37, 38, 39, 42}, {40, 41, 43, 45}, {44, 46, 47, 48}) is enabled and has a configured speed of 25G the other 3 ports may only be enabled if they also have a configured speed of 25G or no speed configured; if one port in each port group of 4 ports is enabled and has a configured speed of 1G or 10G the other 3 ports may only be enabled if they also have a configured speed of 1G or 10G or no speed configured.

Note 3: Breakout and 40G is only supported on odd numbered ports. For the QSFP28 four port groupings [1-4], [5-8], [9-12], [13-16], [21-24], [25-28], and [29-32] if either of the odd numbered ports within a group is configured for 40G, 4x10G, or 4x25G, then the other odd numbered port in the same group may only be configured if it is configured for one of 40G, 4x10G, or 4x25G (can differ between the odd ports) and neither of the two even numbered ports within the same group can be configured.

Note 4: For the QSFP28 ports, the following port groups exist [n, n+1, n+2, n+3] for n = 1, 5, 9, 13, 17, 21. Breakout for 4x25G or 4x10G is only supported on ports n+1 and n+3. When initially configuring a port with a breakout configuration or port speed that does not already exist on another configured port within the same group, then a link flap and traffic hit may occur on other ports within the same group. When the breakout configuration or port speed is changed for a port in a group, then a link flap and traffic hit may occur on other ports within the same group. If port n+1 within the group is configured for breakout, then port n cannot be configured. In addition if port n+1 is configured for breakout and port n+3 is configured without breakout, then port n+2 may only be configured with the same speed as port n+3. If port n+3 within the group is configured for breakout, then port n+2 cannot be configured. In addition if port n+3 is configured for breakout and port n+1 is configured without breakout, then port n may only be configured with the same speed as port n+1.

7250 IXR details: If the interface corresponds to a connector that has no installed transceiver then the value is accepted without any checking or restriction, and info from state will display the configured value. Otherwise if the configured port-speed is NOT supported by the installed transceiver the port is forced operationally down.

Port Groups and auto-configuration: Manually configured and enabled port-speed (and breakout-modes) take precedence over the auto-configured port-speed. This means that configuring and enabling a port within a port-group can have a side effect to take down an operational port that had its speed set based on the auto-configuration feature. If there is risk of mixing transceiver types within a port group, then it is recommended to always manually configure the speed for enabled ports

**Context**

[interface name](#) *string* [ethernet](#) [port-speed](#) *keyword*

**Tree**

[port-speed](#)

**Options**

- 10M

- 100M
- 1G
- 10G
- 25G
- 40G
- 50G
- 100G
- 200G
- 400G
- 800G
- 1T

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **ptp-asymmetry** *number*

<b>Description</b>	This command configures the PTP asymmetry delay on the Ethernet port This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">ptp-asymmetry</a> <i>number</i>
<b>Tree</b>	<a href="#">ptp-asymmetry</a>
<b>Default</b>	0
<b>Units</b>	nanoseconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-timestamping**

<b>Description</b>	Enable the ptp-timestamping context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">ptp-timestamping</a>
<b>Tree</b>	<a href="#">ptp-timestamping</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7220 IXR-D5, 7250 IXR-X3b, 7730 SXR

**disable-ip-timestamping** *boolean*

<b>Description</b>	Disables timestamping of PTP over IP messages on this port  For platforms supporting PTP functionality, any transiting PTP over IP packets are timestamped in hardware by default, regardless of whether PTP is enabled on the system. To avoid unwanted correction-field updates of PTP transit packets on ports (ports involved in PTP packet transit only), this command can be used to disabled the timestmapping.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet ptp-timestamping disable-ip-timestamping</a> <i>boolean</i>
<b>Tree</b>	<a href="#">disable-ip-timestamping</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7220 IXR-D5, 7250 IXR-X3b, 7730 SXR

**reload-delay** *number*

<b>Description</b>	Configure reload-delay timer for Ethernet interfaces.  The reload-delay timer starts when the associated XDP interface state is learned. While the timer is running, the interface transceiver laser is disabled to avoid attracting traffic from the connected device at the other end of the interface. The reload-delay timer should be used in multi-homing interfaces and be set to a value long enough to allow the system to recover all the network protocols upon reboot, before start attracting traffic from the multi-homed device.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet reload-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">reload-delay</a>
<b>Range</b>	1 to 86400
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reload-delay-expires** *string*

<b>Description</b>	The remaining time until the reload-delay expires and the interface can go operationally up.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet reload-delay-expires</a> <i>string</i>
<b>Tree</b>	<a href="#">reload-delay-expires</a>



<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### standby-signaling *keyword*

<b>Description</b>	Indicates the standby-signaling used in the interface.  An application using a port-based redundancy mechanism will trigger the standby signaling on the ethernet interface if the interface is selected as standby.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet standby-signaling</a> <i>keyword</i>
<b>Tree</b>	<a href="#">standby-signaling</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• power-off</li> <li>• lacp</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### in-1024b-to-1518b-frames *number*

<b>Description</b>	Number of received Ethernet frames that are 1024-1518 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-1024b-to-1518b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-1024b-to-1518b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-128b-to-255b-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are 128-255 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-128b-to-255b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-128b-to-255b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-1519b-or-longer-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are 1519 bytes or longer
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-1519b-or-longer-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-1519b-or-longer-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-256b-to-511b-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are 256-511 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-256b-to-511b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-256b-to-511b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-512b-to-1023b-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are 512-1023 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-512b-to-1023b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-512b-to-1023b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-64b-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are exactly 64 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-64b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-64b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-65b-to-127b-frames** *number*

<b>Description</b>	Number of received Ethernet frames that are 65-127 bytes in length
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-65b-to-127b-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-65b-to-127b-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-crc-error-frames** *number*

<b>Description</b>	Number of receive error events due to FCS/CRC check failure
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-crc-error-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-crc-error-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-fragment-frames** *number*

<b>Description</b>	Number of fragment frames received on the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics in-fragment-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-fragment-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-jabber-frames** *number*

<b>Description</b>	Number of jabber frames received on the interface. Jabber frames are typically defined as oversize frames which also have a bad CRC
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics</a> <a href="#">in-jabber-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-jabber-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-mac-pause-frames** *number*

<b>Description</b>	Number of MAC layer PAUSE frames received on the interface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics</a> <a href="#">in-mac-pause-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-mac-pause-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-oversize-frames** *number*

<b>Description</b>	Number of oversize frames received on the interface (i.e. frames that exceed the operational port MTU)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics</a> <a href="#">in-oversize-frames</a> <i>number</i>
<b>Tree</b>	<a href="#">in-oversize-frames</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the MAC counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics</a> <a href="#">last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **out-1024b-to-1518b-frames** *number*

**Description** Number of transmitted Ethernet frames that are 1024-1518 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-1024b-to-1518b-frames](#) *number*  
**Tree** [out-1024b-to-1518b-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-128b-to-255b-frames** *number*

**Description** Number of transmitted Ethernet frames that are 128-255 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-128b-to-255b-frames](#) *number*  
**Tree** [out-128b-to-255b-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-1519b-or-longer-frames** *number*

**Description** Number of transmitted Ethernet frames that are 1519 bytes or longer  
**Context** [interface name](#) *string* [ethernet statistics out-1519b-or-longer-frames](#) *number*  
**Tree** [out-1519b-or-longer-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-256b-to-511b-frames** *number*

**Description** Number of transmitted Ethernet frames that are 256-511 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-256b-to-511b-frames](#) *number*  
**Tree** [out-256b-to-511b-frames](#)  
**Default** 0  
**Configurable** False

**Platforms** Supported on all platforms

### **out-512b-to-1023b-frames** *number*

**Description** Number of transmitted Ethernet frames that are 512-1023 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-512b-to-1023b-frames](#) *number*  
**Tree** [out-512b-to-1023b-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-64b-frames** *number*

**Description** Number of transmitted Ethernet frames that are exactly 64 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-64b-frames](#) *number*  
**Tree** [out-64b-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-65b-to-127b-frames** *number*

**Description** Number of transmitted Ethernet frames that are 65-127 bytes in length  
**Context** [interface name](#) *string* [ethernet statistics out-65b-to-127b-frames](#) *number*  
**Tree** [out-65b-to-127b-frames](#)  
**Default** 0  
**Configurable** False  
**Platforms** Supported on all platforms

### **out-mac-pause-frames** *number*

**Description** Number of MAC layer PAUSE frames sent on the interface  
**Context** [interface name](#) *string* [ethernet statistics out-mac-pause-frames](#) *number*  
**Tree** [out-mac-pause-frames](#)  
**Default** 0  
**Configurable** False

**Platforms** Supported on all platforms

## storm-control

**Description** Enable the storm-control context

**Context** [interface name](#) *string* [ethernet storm-control](#)

**Tree** [storm-control](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## broadcast-rate *number*

**Description** The maximum rate allowed for ingress broadcast frames on the interface

The rate can be set in multiple of 64kbps. If the rate is configured to any value in the 1-127 kbps range, the effective rate will be 64kbps and shown in the operational rate. If any value in the 128-191 range, the effective rate will be 128kbps and shown in the operational rate, and so on for higher rates. When the rate is set to zero, all the broadcast traffic in the interface is discarded.

The maximum rate that can be effectively configured in 7220 D4/D5 platforms is 132000000. When a configured percentage exceeds that value, the maximum supported rate is set and shown in the operational-broadcast-rate.

**Context** [interface name](#) *string* [ethernet storm-control broadcast-rate](#) *number*

**Tree** [broadcast-rate](#)

**Range** 0 to 132000000

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multicast-rate *number*

**Description** The maximum rate allowed for ingress multicast frames on the interface

The rate can be set in multiple of 64kbps. If the rate is configured to any value in the 1-127 kbps range, the effective rate will be 64kbps and shown in the operational rate. If any value in the 128-191 range, the effective rate will be 128kbps and shown in the operational rate, and so on for higher

rates. When the rate is set to zero, all the multicast traffic in the interface is discarded.

The maximum rate that can be effectively configured in 7220 D4/D5 platforms is 132000000. When a configured percentage exceeds that value, the maximum supported rate is set and shown in the operational-multicast-rate.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control multicast-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">multicast-rate</a>
<b>Range</b>	0 to 132000000
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-broadcast-rate** *number*

<b>Description</b>	The operational maximum rate for ingress broadcast frames programmed on the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control operational-broadcast-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-broadcast-rate</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-multicast-rate** *number*

<b>Description</b>	The operational maximum rate for ingress multicast frames programmed on the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control operational-multicast-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-multicast-rate</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**operational-unknown-unicast-rate** *number*

<b>Description</b>	The operational maximum rate for ingress unknown unicast frames programmed on the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control operational-unknown-unicast-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-unknown-unicast-rate</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rising-threshold-action** *keyword*

<b>Description</b>	Configures the action triggered when traffic exceeds the configured storm-control rates
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control rising-threshold-action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">rising-threshold-action</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none No action is triggered upon exceeding any of the storm-control configured rates</li> <li>• trigger-event An event is triggered upon exceeding any of the storm-control configured rates</li> <li>• disable-interface the interface is disabled upon exceeding any of the storm-control configured rates</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**units** *keyword*

<b>Description</b>	Units of storm-control policer in kbps or percentage of the interface bandwidth
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control units</a> <i>keyword</i>

<b>Tree</b>	<a href="#">units</a>
<b>Default</b>	percentage
<b>Options</b>	<ul style="list-style-type: none"> <li>• kbps</li> <li>• percentage</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-unicast-rate *number*

<b>Description</b>	<p>The maximum rate allowed for ingress unknown unicast frames on the interface</p> <p>The rate can be set in multiple of 64kbps. If the rate is configured to any value in the 1-127 kbps range, the effective rate will be 64kbps and shown in the operational rate. If any value in the 128-191 range, the effective rate will be 128kbps and shown in the operational rate, and so on for higher rates. When the rate is set to zero, all the unknown unicast traffic in the interface is discarded.</p> <p>The maximum rate that can be effectively configured in 7220 D4/D5 platforms is 132000000. When a configured percentage exceeds that value, the maximum supported rate is set and shown in the operational-multicast-rate.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet storm-control unknown-unicast-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-unicast-rate</a>
<b>Range</b>	0 to 132000000
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### syncce

<b>Description</b>	This struct containing all attributes for SyncE in line/client ports.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet syncce</a>
<b>Tree</b>	<a href="#">syncce</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	This struct containing all attributes for QL/SSM with SyncE in these ports.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">syncce</a> <a href="#">ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configure the administrative state for SyncE in line/client ports. When enabled, the associated transmit and receiver ports are set to synchronous mode and ESMC/SSM processing is enabled. Otherwise, all syncE functions are disabled in the port.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet</a> <a href="#">syncce</a> <a href="#">ssm</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-complex** *reference*

<b>Description</b>	The forwarding-complex on which this interface resides This field is not populated for non-forwarding-complex-attached interfaces, for example mgmt0.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">forwarding-complex</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Reference</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i> <a href="#">forwarding-complex</a> <a href="#">name</a> <i>keyword</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**forwarding-mode** *keyword*

<b>Description</b>	The forwarding mode for Ethernet frames received on this interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">forwarding-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• store-and-forward</li> <li>• cut-through</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**ifindex** *number*

<b>Description</b>	System-wide persistent unique ifIndex assigned to the interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ifindex</a> <i>number</i>
<b>Tree</b>	<a href="#">ifindex</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**lag**

<b>Description</b>	Container for options related to LAG
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a>
<b>Tree</b>	<a href="#">lag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP**

<b>Description</b>	LACP parameters for the associated LAG
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <a href="#">lACP</a>
<b>Tree</b>	<a href="#">lACP</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-key number**

**Description** Configure the LACP admin-key to be advertised by the local system. If this value is not specified a value starting from 32768 is automatically assigned by the system.

**Context** [interface name](#) *string lag lacp admin-key number*

**Tree** [admin-key](#)

**Range** 1 to 65535

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval keyword**

**Description** Set the period between LACP messages -- uses the lacp-period-type enumeration.

**Context** [interface name](#) *string lag lacp interval keyword*

**Tree** [interval](#)

**Default** SLOW

**Options**

- FAST  
Send LACP packets every second
- SLOW  
Send LACP packets every 30 seconds

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lacp-mode keyword**

**Description** ACTIVE is to initiate the transmission of LACP packets. PASSIVE is to wait for peer to initiate the transmission of LACP packets.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <a href="#">lacp</a> <a href="#">lacp-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">lacp-mode</a>
<b>Default</b>	ACTIVE
<b>Options</b>	<ul style="list-style-type: none"> <li>ACTIVE Interface is an active member, i.e., will detect and maintain aggregates</li> <li>PASSIVE Interface is a passive member, i.e., it participates with an active partner</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-id-mac** *string*

<b>Description</b>	The MAC address portion of the node's System ID. This is combined with the system priority to construct the 8-octet system-id. If not configured, the system-ID configured at the system/ level is used.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <a href="#">lacp</a> <a href="#">system-id-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">system-id-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-priority** *number*

<b>Description</b>	System priority used by the node on this LAG interface. Lower value is higher priority for determining which node is the controlling system. If not configured, the system-priority configured at the system/ level is used.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <a href="#">lacp</a> <a href="#">system-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">system-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lacp-fallback-mode** *keyword*

<b>Description</b>	Specifies lacp-fallback mode if enabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag lacp-fallback-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">lacp-fallback-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>static</li> </ul> Set the LACP-fallback mode as static
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lacp-fallback-timeout** *number*

<b>Description</b>	Specifies the LACP-fallback timeout interval in seconds
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag lacp-fallback-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">lacp-fallback-timeout</a>
<b>Range</b>	4 to 3600
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lag-speed** *number*

<b>Description</b>	reports current aggregate bandwidth speed of the associated LAG
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag lag-speed</a> <i>number</i>
<b>Tree</b>	<a href="#">lag-speed</a>
<b>Units</b>	Mbps
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lag-type** *keyword*

<b>Description</b>	Sets the type of LAG, i.e., how it is configured / maintained
<b>Context</b>	<a href="#">interface name</a> <i>string lag lag-type keyword</i>
<b>Tree</b>	<a href="#">lag-type</a>
<b>Default</b>	static
<b>Options</b>	<ul style="list-style-type: none"> <li>• lacp LAG managed by LACP</li> <li>• static Statically configured bundle / LAG</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**member name** *reference*

<b>Description</b>	Reports the list of interfaces associated with the LAG instance
<b>Context</b>	<a href="#">interface name</a> <i>string lag member name reference</i>
<b>Tree</b>	<a href="#">member</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">interface name</a> <i>string lag member name reference</i>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**lACP**

<b>Description</b>	Operational status data for the member interfaces
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP</a>
<b>Tree</b>	<a href="#">lACP</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**activity keyword**

<b>Description</b>	Indicates participant is active or passive
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP activity keyword</a>
<b>Tree</b>	<a href="#">activity</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ACTIVE Interface is an active member, i.e., will detect and maintain aggregates</li> <li>PASSIVE Interface is a passive member, i.e., it participates with an active partner</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**aggregatable boolean**

<b>Description</b>	A true value indicates that the participant will allow the link to be used as part of the aggregate. A false value indicates the link should be used as an individual link
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP aggregatable boolean</a>
<b>Tree</b>	<a href="#">aggregatable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**collecting** *boolean*

<b>Description</b>	If true, the participant is collecting incoming frames on the link, otherwise false
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP collecting</a> <i>boolean</i>
<b>Tree</b>	<a href="#">collecting</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**distributing** *boolean*

<b>Description</b>	When true, the participant is distributing outgoing frames; when false, distribution is disabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP distributing</a> <i>boolean</i>
<b>Tree</b>	<a href="#">distributing</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-port-priority** *number*

<b>Description</b>	Configure the port priority for LACP. This value is used to determine which port should be activated with LACP fallback mode. Lower values are more preferred.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP lACP-port-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">lACP-port-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-key** *number*

<b>Description</b>	Current operational value of the key for the aggregate interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP oper-key</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-key</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**partner-id** *string*

<b>Description</b>	MAC address representing the protocol partner's interface system ID
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP partner-id</a> <i>string</i>
<b>Tree</b>	<a href="#">partner-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**partner-key** *number*

<b>Description</b>	Operational value of the protocol partner's key
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP partner-key</a> <i>number</i>
<b>Tree</b>	<a href="#">partner-key</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**partner-port-num** *number*

<b>Description</b>	Port number of the partner (remote) port for this member port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP partner-port-num</a> <i>number</i>
<b>Tree</b>	<a href="#">partner-port-num</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-num *number*

<b>Description</b>	Port number of the local (actor) aggregation member
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP port-num</a> <i>number</i>
<b>Tree</b>	<a href="#">port-num</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	LACP protocol counters
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lACP-errors *number*

<b>Description</b>	Number of LACPDU illegal packet errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">lACP-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-in-pkts** *number*

<b>Description</b>	Number of LACPDU received
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-in-pkts number</a>
<b>Tree</b>	<a href="#">lACP-in-pkts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-out-pkts** *number*

<b>Description</b>	Number of LACPDU transmitted
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-out-pkts number</a>
<b>Tree</b>	<a href="#">lACP-out-pkts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-rx-errors** *number*

<b>Description</b>	Number of LACPDU receive packet errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-rx-errors number</a>
<b>Tree</b>	<a href="#">lACP-rx-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-tx-errors** *number*

<b>Description</b>	Number of LACPDU transmit packet errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-tx-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">lACP-tx-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lACP-unknown-errors** *number*

<b>Description</b>	Number of LACPDU unknown packet errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP statistics</a> <a href="#">lACP-unknown-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">lACP-unknown-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**synchronization** *keyword*

<b>Description</b>	Indicates whether the participant is in-sync or out-of-sync
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">lACP synchronization</a> <i>keyword</i>
<b>Tree</b>	<a href="#">synchronization</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>IN_SYNC Participant is in sync with the system id and key transmitted</li> <li>OUT_SYNC Participant is not in sync with the system id and key transmitted</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### system-id *string*

**Description** MAC address that defines the local system ID for the aggregate interface

**Context** [interface name](#) *string* [lag member name](#) *reference* [lACP system-id](#) *string*

**Tree** [system-id](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### timeout *keyword*

**Description** The timeout type (short or long) used by the participant

**Context** [interface name](#) *string* [lag member name](#) *reference* [lACP timeout](#) *keyword*

**Tree** [timeout](#)

**Options**

- LONG
 

Participant wishes to use long timeouts to detect status of the aggregate, i.e., will expect less frequent transmissions. Long timeout is 90 seconds.
- SHORT
 

Participant wishes to use short timeouts, i.e., expects frequent transmissions to aggressively detect status changes. Short timeout is 3 seconds.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-change *string*

**Description** The date and time of the most recent change to the LAG member-link state

**Context** [interface name](#) *string* [lag member name](#) *reference* [last-change](#) *string*

**Tree** [last-change](#)

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### microbfd-enabled *boolean*

<b>Description</b>	Indicates if microBFD is currently used in the determination of the member-link oper-status
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">microbfd-enabled</a> <i>boolean</i>
<b>Tree</b>	<a href="#">microbfd-enabled</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-down-reason *keyword*

<b>Description</b>	Reason for operational down state for the associated LAG
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• port-disabled</li> <li>• port-oper-disabled</li> <li>• lag-admin-disabled</li> <li>• lacp-down</li> <li>• microBFD-down</li> <li>• lag-min-link-threshold</li> <li>• lag-speed-mismatch</li> <li>• other</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**oper-state keyword**

<b>Description</b>	Operational state for the associated LAG
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag member name</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **member-speed** *keyword*

<b>Description</b>	Specifies the link speed of allowed member-links
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <a href="#">member-speed</a> <i>keyword</i>
<b>Tree</b>	<a href="#">member-speed</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 10M Indicates the the LAG member-links must be 10M to be active</li> <li>• 100M Indicates the the LAG member-links must be 100M to be active</li> <li>• 1G Indicates the the LAG member-links must be 1G to be active</li> <li>• 10G Indicates the the LAG member-links must be 10G to be active</li> <li>• 25G Indicates the the LAG member-links must be 25G to be active</li> <li>• 40G Indicates the the LAG member-links must be 40G to be active</li> <li>• 50G Indicates the the LAG member-links must be 50G to be active</li> <li>• 100G Indicates the the LAG member-links must be 100G to be active</li> <li>• 400G Indicates the the LAG member-links must be 400G to be active</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-links** *number*

<b>Description</b>	Specifies the minimum number of member interfaces that must be active for the aggregate interface to be available
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">lag</a> <i>min-links</i> <i>number</i>
<b>Tree</b>	<a href="#">min-links</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-change** *string*

<b>Description</b>	The date and time of the most recent change to the interface state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**linecard** *reference*

<b>Description</b>	The linecard on which this interface resides This field is not populated for non-forwarding-complex-attached interfaces, for example mgmt0.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">linecard</a> <i>reference</i>
<b>Tree</b>	<a href="#">linecard</a>
<b>Reference</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**loopback-mode** *keyword*

<b>Description</b>	Loopback mode of the port
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<b>Context</b>	<code>interface name string loopback-mode keyword</code>
<b>Tree</b>	<code>loopback-mode</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none No loopback is applied</li> <li>• facility A loopback which directs traffic normally transmitted on the port back into the switch as if received on the same port from an external source On some systems this is also called local loopback.</li> <li>• terminal A loopback which directs traffic received from an external source on the port back out the transmit side of the same port.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mtu number**

<b>Description</b>	<p>Port MTU in bytes including ethernet overhead but excluding 4-bytes FCS</p> <p>If a transmitted packet exceeds this size it is dropped. The default value for ethernet-x interfaces is taken from <code>/system/mtu/default-port-mtu</code>. For the <code>mgmt0</code> and <code>mgmt0-standby</code> interfaces the default is 1514 bytes, but the value can be changed for each interface individually. Port MTU is not configurable for loopback interfaces or <code>irb</code> interfaces. For <code>irb</code> interfaces, if the size of the ip packets to be routed to a <code>mac-vrf</code> has to be restricted, the <code>subinterface.ip-mtu</code> should be configured instead. The max mtu for the <code>mgmt0</code> and <code>mgmt0-standby</code> interfaces is 9216. The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum port MTU of 9412 bytes and minimum of 1500 bytes. The 7730 SXR systems support a maximum port MTU of 9408 bytes and minimum of 1500 bytes. All other systems support a maximum port MTU of 9500 and minimum of 1500 bytes. Each 7250 IXR IMM supports a maximum of 8 different port MTU values. 7220 IXR systems do not have any limit on the maximum number of different port MTU values.</p>
<b>Context</b>	<code>interface name string mtu number</code>
<b>Tree</b>	<code>mtu</code>
<b>Range</b>	1450 to 9500
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**num-physical-channels** *number*

<b>Description</b>	<p>Sets the number of lanes or physical channels assigned to this interface or to the set of interfaces within this breakout group</p> <p>This leaf can be used to distinguish between transceivers that provide the same port-speed or breakout-configuration but using different PMAs. For example, if a port supports two transceivers providing 100G optical signal but one uses CAUI4 and the other uses 100GAUI-2, then this leaf can be set to 4 for the CAUI4 transceiver and 2 for the 100GAUI-2 transceiver. Similarly, a transceiver that provides a breakout of 4 ports of 100G using 4 x 100GAUI2 would set this leaf to 8 but a transceiver using 4 x 100GAUI-1 would have this leaf set to 4.</p> <p>If not set, then the default shall be as follows: 1 is used for 10G, 25G 2 is used for 50G 4 is used for 40G, 100G, 2x50G, 1x100G, 4x10G, 4x25G 6 is used for 3x100G (digital coherent optics) 8 is used for 200G, 400G, 800G, 2x100G, 4x100G, 8x50G</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">num-physical-channels</a> <i>number</i>
<b>Tree</b>	<a href="#">num-physical-channels</a>
<b>Range</b>	1 to 8
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7220 IXR-H4

**oper-down-reason** *keyword*

<b>Description</b>	The first (and possibly only) reason for the port being operationally down
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• port-admin-disabled</li> <li>• mda-admin-disabled</li> <li>• transceiver-oper-down</li> <li>• port-not-present</li> <li>• mda-not-present</li> <li>• phy-initializing</li> <li>• lower-layer-down</li> <li>• auto-negotiation-mismatch</li> <li>• port-mtu-resource-exceeded</li> <li>• unsupported-speed</li> <li>• unsupported-fec</li> <li>• other</li> </ul>

- fabric-availability
- no-active-links
- min-link-threshold
- port-9-12-speed-mismatch
- lag-resource-exceeded
- lag-member-resource-exceeded
- standby-signaling
- interface-hold-time-up-active
- interface-reload-timer-active
- connector-down
- event-handler
- unsupported-breakout-port
- cfm-ccm-defect
- crc-monitor-fail-threshold
- symbol-monitor-fail-threshold
- link-loss-forwarding
- storm-control-action
- unsupported-num-channels-for-speed

**Configurable**

False

**Platforms**

Supported on all platforms

### **oper-state** *keyword*

**Description**

The operational state of the interface

**Context**

[interface name](#) *string* [oper-state](#) *keyword*

**Tree**

[oper-state](#)

**Options**

- up
- down
- testing

**Configurable**

False

**Platforms**

Supported on all platforms

### **p4rt**

**Description**

Top-level container for P4Runtime interface configuration and state

**Context**

[interface name](#) *string* [p4rt](#)

<b>Tree</b>	<a href="#">p4rt</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **id number**

<b>Description</b>	<p>The numeric identifier used by the controller to address the interface</p> <p>This ID is the interface ifIndex by default, or is assigned by an external-to-the-device entity (e.g., an SDN management system) to establish an externally deterministic numeric reference for the interface.</p> <p>The programming entity must ensure that the ID is unique within the required context.</p> <p>Note that this identifier is used only when a numeric reference to the interface is required, it does not replace the unique name assigned to the interface.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">p4rt id number</a>
<b>Tree</b>	<a href="#">id</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **parent-id number**

<b>Description</b>	<p>The numeric ID used by the controller to address the ASIC this interface resides on</p> <p>This is the ID configured at <code>/platform/linecard/forwarding-complex/p4rt/id</code>.</p> <p>This ID may be referred to as a 'device', 'node' or 'target' by the P4RT specification.</p> <p>Each switching ASIC (i.e., node) is addressed by the external entity based on its numeric identifier.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">p4rt parent-id number</a>
<b>Tree</b>	<a href="#">parent-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## packet-link-qualification

<b>Description</b>	gNOI Packet Link Qualification results
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification</a>
<b>Tree</b>	<a href="#">packet-link-qualification</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### result id *string*

<b>Description</b>	Enter the result list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification</a> <a href="#">result id</a> <i>string</i>
<b>Tree</b>	<a href="#">result</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### id *string*

<b>Description</b>	Packet link qualification test ID
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification</a> <a href="#">result id</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### end-time *string*

<b>Description</b>	End time of the test
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification</a> <a href="#">result id</a> <i>string</i> <a href="#">end-time</a> <i>string</i>
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**expected-rate** *number*

<b>Description</b>	Expected rate of the test This is the computed or observed rate that the service expected to be maintained throughout the qualification duration.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">expected-rate number</a>
<b>Tree</b>	<a href="#">expected-rate</a>
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**oper-state** *keyword*

<b>Description</b>	State of the qualification test
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unspecified Unspecified state of the qualification</li> <li>• error The qualification has errored</li> <li>• idle Initial state for the qualification</li> <li>• setup Interface is being configured</li> <li>• running Qualification underway</li> <li>• teardown Interface is being reset</li> <li>• completed Qualification is complete</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**packets-dropped** *number*

<b>Description</b>	Number of packets dropped
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">packets-dropped</a> <i>number</i>
<b>Tree</b>	<a href="#">packets-dropped</a>
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**packets-error** *number*

<b>Description</b>	Number of packets transmitted that experienced corruption
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">packets-error</a> <i>number</i>
<b>Tree</b>	<a href="#">packets-error</a>
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**packets-received** *number*

<b>Description</b>	Number of packets received
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">packets-received</a>
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**packets-sent** *number*

<b>Description</b>	Number of packets sent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">packets-sent</a> <i>number</i>

<b>Tree</b>	<a href="#">packets-sent</a>
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **qualification-rate** *number*

<b>Description</b>	Observed rate of the test This is the computed or observed rate that the service expected to be maintained throughout the qualification duration.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">qualification-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">qualification-rate</a>
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **start-time** *string*

<b>Description</b>	Start time of the test
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **status** *keyword*

<b>Description</b>	Status of the test Only set when the test is in the error state.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>not-found Request ID not found</li> </ul>

- **invalid-argument**  
Unsupported configuration parameter
- **canceled**  
Test was canceled
- **deadline-exceeded**  
A test stage took too long to complete
- **failed-precondition**  
A test stage was not setup properly
- **internal**  
A test stage had unexpected serious errors

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **status-message** *string*

<b>Description</b>	Status message of the test Only set when the test is in the error state.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification result id</a> <i>string</i> <a href="#">status-message</a> <i>string</i>
<b>Tree</b>	<a href="#">status-message</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **phy-group-members** *string*

<b>Description</b>	The group of interfaces sharing a phy with this interface On the 7220 IXR-D2 and 7220 IXR-D2L platforms this group of interfaces must be set to the same speed, either 1/10G or 25G.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">phy-group-members</a> <i>string</i>
<b>Tree</b>	<a href="#">phy-group-members</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7250 IXR-X1b, 7730 SXR-1d-32D

**physical-channel** *reference*

<b>Description</b>	The list of transceiver channels associated with this port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">physical-channel</a> <i>reference</i>
<b>Tree</b>	<a href="#">physical-channel</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**sflow**

<b>Description</b>	Context to configure sFlow parameters
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">sflow</a>
<b>Tree</b>	<a href="#">sflow</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable sFlow on this interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">sflow</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a>

<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **carrier-transitions** *number*

<b>Description</b>	Number of times the interface state has transitioned from down to up. This is reset to zero when the device is started or reset or the counters are cleared.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">carrier-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">carrier-transitions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-broadcast-packets** *number*

<b>Description</b>	Corresponds to ifHCInBroadcastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-broadcast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-broadcast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-discarded-packets** *number*

<b>Description</b>	Corresponds to ifInDiscards from the IFMIB. This counts the number of IP packets discarded due to VLAN mismatch, unknown dest MAC or drop by system-filter drop action. On 7250 IXR/IXRe systems this counter is not expected to increment above zero.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-error-packets** *number*

<b>Description</b>	Corresponds to ifInErrors from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-fcs-error-packets** *number*

<b>Description</b>	Ingress FCS errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-fcs-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-fcs-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-multicast-packets** *number*

<b>Description</b>	Corresponds to ifHCInMulticastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-multicast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-multicast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-octets** *number*

<b>Description</b>	Corresponds to ifHCInOctets from the IFMIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-packets** *number*

<b>Description</b>	Sum of all received packets, independent of protocol and forwarding type and before discards and errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-unicast-packets** *number*

<b>Description</b>	Corresponds to ifHCInUcastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics in-unicast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-unicast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the interface counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-broadcast-packets** *number*

<b>Description</b>	Corresponds to ifHCOutBroadcastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics out-broadcast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-broadcast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**out-discarded-packets** *number*

<b>Description</b>	Corresponds to ifOutDiscards from the IF-MIB. On 7250 IXR-6/10 systems this counts packets dropped by an egress IP ACL of any of the port's subinterfaces.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics out-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-error-packets** *number*

<b>Description</b>	Corresponds to ifOutErrors from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-mirror-octets** *number*

<b>Description</b>	This counts the number of outgoing mirrored octets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics out-mirror-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-mirror-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-mirror-packets** *number*

<b>Description</b>	This counts the number of outgoing mirrored packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics out-mirror-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-mirror-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-multicast-packets** *number*

<b>Description</b>	Corresponds to ifHCOutMulticastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">out-multicast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-multicast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-octets** *number*

<b>Description</b>	Corresponds to ifHCOutOctets from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">out-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-packets** *number*

<b>Description</b>	Sum of all transmitted packets, independent of protocol and forwarding type and before discards and errors
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-unicast-packets** *number*

<b>Description</b>	Corresponds to ifHCOutUcastPkts from the IF-MIB
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics</a> <a href="#">out-unicast-packets</a> <i>number</i>

<b>Tree</b>	<a href="#">out-unicast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### subinterface [index number](#)

<b>Description</b>	The list of subinterfaces (logical interfaces) associated with a physical interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index number</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4095

### [index number](#)

<b>Description</b>	The index of the subinterface, or logical interface number
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index number</a>
<b>Range</b>	0 to 9999
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### admin-state *keyword*

<b>Description</b>	The configured, desired state of the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index number</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**anycast-gw**

<b>Description</b>	Enable the anycast-gw context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">anycast-gw</a>
<b>Tree</b>	<a href="#">anycast-gw</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anycast-gw-mac** *string*

<b>Description</b>	The MAC address of associated to the anycast-gw IP address.  If the anycast-gw MAC address is not configured, it will be auto-derived from the virtual-router-id value as per draft-ietf-bess-evpn-inter-subnet-forwarding following the format 00:00:5E:00:01:VRID.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">anycast-gw</a> <a href="#">anycast-gw-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">anycast-gw-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anycast-gw-mac-origin** *keyword*

<b>Description</b>	Origin of the active anycast-gateway MAC address.  If not configured, the anycast-gateway-mac will be auto-derived out of 00:00:5E:00:01:VRID, where VRID is the Virtual Router Identifier of the subinterface anycast-gw.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">anycast-gw</a> <a href="#">anycast-gw-mac-origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">anycast-gw-mac-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• configured</li> <li>• vrid-auto-derived</li> </ul>
<b>Configurable</b>	False

<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### virtual-router-id *number*

<b>Description</b>	The Virtual Router Identifier (VRID) value used to auto-derive the anycast-gw-mac in the format 00:00:5E:00:01:VRID.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">anycast-gw virtual-router-id</a> <i>number</i>
<b>Tree</b>	<a href="#">virtual-router-id</a>
<b>Range</b>	1 to 255
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bridge-table

<b>Description</b>	Enable the Bridge Table on the subinterface and configure associated parameters
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discard-unknown-src-mac *boolean*

<b>Description</b>	Discard frames with unknown source mac addresses. The source mac address of the discarded frame is never learned when this command is enabled.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table discard-unknown-src-mac</a> <i>boolean</i>
<b>Tree</b>	<a href="#">discard-unknown-src-mac</a>

<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-duplication

<b>Description</b>	Enter the mac-duplication context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a>
<b>Tree</b>	<a href="#">mac-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## action *keyword*

<b>Description</b>	Action to take on the subinterface upon detecting at least one mac addresses as duplicate on the subinterface. In particular:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">action</a>
<b>Default</b>	use-net-instance-action
<b>Options</b>	<ul style="list-style-type: none"> <li>• use-net-instance-action</li> <li>• stop-learning</li> <li>• blackhole</li> <li>• oper-down</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-entries**

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac address string**

<b>Description</b>	macs duplicate on the bridging instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dup-detect-time string**

<b>Description</b>	The date and time when the mac was declared duplicate
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">dup-detect-time</a> <i>string</i>

<b>Tree</b>	<a href="#">dup-detect-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time-remaining (*keyword* | *number*)

<b>Description</b>	remaining hold down time for duplicate mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">hold-down-time-remaining</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">hold-down-time-remaining</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>indefinite</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-learning

<b>Description</b>	Enter the mac-learning context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Configurable state of the learning procedures for dynamic mac addresses. If disabled, the existing macs in the bridge-table will be kept (and refreshed if new frames arrive for them) but no new mac addresses will be learned.
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Frames with unknown mac addresses are not dropped, unless discard-unknown-src-mac is configured.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-learning admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aging

<b>Description</b>	Enter the aging context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-learning aging</a>
<b>Tree</b>	<a href="#">aging</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Configurable state of the aging for the dynamic mac entries in the bridge table. If disabled, dynamically learned mac entries will be programmed in the bridge table until the network instance is disabled.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-learning aging admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## learnt-entries

**Description** Enter the learnt-entries context

**Context** [interface name](#) *string* [subinterface index](#) *number* [bridge-table mac-learning learnt-entries](#)

**Tree** [learnt-entries](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac *address string*

**Description** macs learnt on the bridging instance

**Context** [interface name](#) *string* [subinterface index](#) *number* [bridge-table mac-learning learnt-entries mac address](#) *string*

**Tree** [mac](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

**Description** Enter the address context

**Context** [interface name](#) *string* [subinterface index](#) *number* [bridge-table mac-learning learnt-entries mac address](#) *string*

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**aging** (*number* | *keyword*)

<b>Description</b>	remaining age time for learnt macs
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">aging</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">aging</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this learnt mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-limit**

<b>Description</b>	Bridge Table size and thresholds.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-limit</a>
<b>Tree</b>	<a href="#">mac-limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-entries** *number*

<b>Description</b>	Maximum number of mac addresses allowed in the bridge-table.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-limit maximum-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Range</b>	1 to 8192
<b>Default</b>	250
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**warning-threshold-pct** *number*

<b>Description</b>	Percentage of the configured max-number-macs over which a warning is triggered. The warning message is cleared when the percentage drops below the configured percentage minus 5%
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-limit warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	6 to 100
<b>Default</b>	95
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-table**

<b>Description</b>	Enter the mac-table context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-table</a>
<b>Tree</b>	<a href="#">mac-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,

7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac address string

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-slots number

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">failed-slots</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> </ul>

- irb-interface
- evpn
- evpn-static
- irb-interface-anycast
- proxy-anti-spoof
- reserved
- eth-cfm
- irb-interface-vrrp

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics****Description**

Enter the statistics context

**Context**

[interface name](#) *string* [subinterface](#) *index* *number* [bridge-table](#) [statistics](#)

**Tree**

[statistics](#)

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number***Description**

The total number of entries that are active on the sub-interface.

**Context**

[interface name](#) *string* [subinterface](#) *index* *number* [bridge-table](#) [statistics](#)  
[active-entries](#) *number*

**Tree**

[active-entries](#)

**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-type** *type keyword*

<b>Description</b>	the type of the mac on the sub-interface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type</a> <i>type keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type</a> <i>type keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> </ul>



- reserved
- eth-cfm
- irb-interface-vrrp

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number***Description**

The total number of entries of this type on the sub-interface

**Context**

[interface name](#) *string* [subinterface index](#) *number* [bridge-table statistics mac-type type](#) *keyword* [active-entries](#) *number*

**Tree**[active-entries](#)**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number***Description**

The total number of macs of this type, which have not been programmed on atleast one slot

**Context**

[interface name](#) *string* [subinterface index](#) *number* [bridge-table statistics mac-type type](#) *keyword* [failed-entries](#) *number*

**Tree**[failed-entries](#)**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number***Description**

The total number of macs of this type , active and inactive, on the sub-interface.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stp**

<b>Description</b>	Enter the stp context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table stp</a>
<b>Tree</b>	<a href="#">stp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the STP protocol for this interface When STP on the network instance is administratively disabled, any BPDUs are forwarded transparently. When STP on the network instance is
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administratively enabled, but the administrative state on a sub-interface is disabled, BPDUs received on such a subinterface are discarded.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">stp</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **auto-edge** *keyword*

<b>Description</b>	Enter the auto-edge context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">stp</a> <a href="#">auto-edge</a> <i>keyword</i>
<b>Tree</b>	<a href="#">auto-edge</a>
<b>Default</b>	no
<b>Options</b>	<ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **edge-port** *keyword*

<b>Description</b>	Enter the edge-port context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">stp</a> <a href="#">edge-port</a> <i>keyword</i>
<b>Tree</b>	<a href="#">edge-port</a>
<b>Default</b>	no
<b>Options</b>	<ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-type *keyword*

<b>Description</b>	Enter the link-type context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">bridge-table stp link-type keyword</a>
<b>Tree</b>	<a href="#">link-type</a>
<b>Default</b>	pt-pt
<b>Options</b>	<ul style="list-style-type: none"> <li>shared</li> <li>pt-pt</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mst-instance [mst-instance number](#)

<b>Description</b>	List of subinterfaces used by this mstp-policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">bridge-table stp mst-instance mst-instance number</a>
<b>Tree</b>	<a href="#">mst-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mst-instance *number*

<b>Description</b>	Name of the subinterface bound to this mstp-policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">bridge-table stp mst-instance mst-instance number</a>
<b>Configurable</b>	True

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### mst-path-cost *number*

<b>Description</b>	Enter the mst-path-cost context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table stp mst-instance mst-instance</a> <i>number</i> <a href="#">mst-path-cost</a> <i>number</i>
<b>Tree</b>	<a href="#">mst-path-cost</a>
<b>Range</b>	1 to 65535
<b>Default</b>	16
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mst-port-priority *number*

<b>Description</b>	Enter the mst-port-priority context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table stp mst-instance mst-instance</a> <i>number</i> <a href="#">mst-port-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">mst-port-priority</a>
<b>Range</b>	16 to 255
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### path-cost *number*

<b>Description</b>	Enter the path-cost context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table stp path-cost</a> <i>number</i>
<b>Tree</b>	<a href="#">path-cost</a>

<b>Range</b>	1 to 65535
<b>Default</b>	16
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-number *number*

<b>Description</b>	Enter the port-number context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">stp</a> <a href="#">port-number</a> <i>number</i>
<b>Tree</b>	<a href="#">port-number</a>
<b>Range</b>	0 to 2047
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority *number*

<b>Description</b>	Enter the priority context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">bridge-table</a> <a href="#">stp</a> <a href="#">priority</a> <i>number</i>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	16 to 255
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### root-guard *keyword*

<b>Description</b>	Enter the root-guard context
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table stp root-guard</a> <i>keyword</i>
<b>Tree</b>	<a href="#">root-guard</a>
<b>Default</b>	no
<b>Options</b>	<ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **collect-detailed-stats** *boolean*

<b>Description</b>	Set to false to disable detailed statistics collection on the routed (non IRB) subinterface  By default detailed statistics are collected for each routed (non IRB) subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">collect-detailed-stats</a> <i>boolean</i>
<b>Tree</b>	<a href="#">collect-detailed-stats</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **collect-irb-stats** *boolean*

<b>Description</b>	Set to false to disable statistics collection on the IRB subinterface  By default basic statistics are collected for each IRB subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">collect-irb-stats</a> <i>boolean</i>
<b>Tree</b>	<a href="#">collect-irb-stats</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **description** *string*

<b>Description</b>	A user-configured description of the interface
--------------------	--

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ethernet-segment-association

<b>Description</b>	ethernet-segment association information.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ethernet-segment-association</a>
<b>Tree</b>	<a href="#">ethernet-segment-association</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### designated-forwarder *boolean*

<b>Description</b>	The value of this leaf indicates if the interface is the designated forwarder for the ethernet-segment on the network-instance.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ethernet-segment-association</a> <a href="#">designated-forwarder</a> <i>boolean</i>
<b>Tree</b>	<a href="#">designated-forwarder</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### es-managed *boolean*

<b>Description</b>	The value of this leaf indicates if the interface is managed by the ethernet-segment on the network-instance.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ethernet-segment-association</a> <a href="#">es-managed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">es-managed</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**ethernet-segment** *string*

<b>Description</b>	The value of this leaf indicates the ethernet-segment, the sub-interface is associated to.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ethernet-segment-association ethernet-segment</a> <i>string</i>
<b>Tree</b>	<a href="#">ethernet-segment</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ifindex** *number*

<b>Description</b>	System-wide persistent unique ifIndex assigned to the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ifindex</a> <i>number</i>
<b>Tree</b>	<a href="#">ifindex</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ip-mtu** *number*

<b>Description</b>	<p>IP MTU of the subinterface in bytes.</p> <p>Includes the IP header but excludes Ethernet encapsulation.</p> <p>IP MTU specifies the maximum sized IPv4 or IPv6 packet that can be transmitted on the subinterface. If an IPv4 or IPv6 packet exceeds this size it is dropped and this may result in the generation of an ICMP error message back to the source.</p> <p>The default IP MTU for a subinterface is taken from <code>/system/mtu/default-ip-mtu</code>. For the <code>mgmt0</code> and <code>mgmt0-standby</code> subinterfaces the default is the associated interface MTU minus the Ethernet encapsulation overhead.</p> <p>The IP MTU is not configurable for subinterfaces of loopback interfaces.</p> <p>The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum IP MTU of 9398 bytes.</p> <p>The 7730 SXR systems support a maximum IP MTU of 9394 bytes.</p> <p>Each 7250 IXR IMM supports a maximum of 4 different IP MTU values. 7220 IXR systems do not have any limit on the maximum number of different IP MTU values.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ip-mtu</a> <i>number</i>

<b>Tree</b>	<a href="#">ip-mtu</a>
<b>Range</b>	1280 to 9486
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ipv4

<b>Description</b>	IPv4 configuration and state for the subinterface
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## address [ip-prefix string](#)

<b>Description</b>	The list of IPv4 addresses assigned to the subinterface.
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	64

## [ip-prefix string](#)

<b>Description</b>	<p>The IPv4 address and prefix length in CIDR notation</p> <p>Subnets on the same subinterface are allowed to overlap as long as the host bits are different. When a locally originated unicast packet is destined to a host covered by multiple subnets associated with a subinterface, the source address is chosen to be the numerically lowest IP address among all these subnets. For example, if the addresses 172.16.1.1/12, 172.16.1.2/12, and 172.16.1.3/12 are configured on the same interface, 172.16.1.1 would be used as a local address when you issue a ping 172.16.1.5 command</p>
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**anycast-gw** *boolean*

<b>Description</b>	This designates the associated IPv4 address as an anycast-gateway IPv4 address of the subinterface.  When this parameter is set to true:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">anycast-gw</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anycast-gw</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin** *keyword*

<b>Description</b>	The origin of the IPv4 address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• other</li> <li>• static</li> <li>• dhcp</li> <li>• link-layer</li> <li>• random</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**primary**

<b>Description</b>	One of the IPv4 prefixes assigned to the subinterface can be explicitly configured as primary by setting this leaf to true. This designates the associated IPv4 address as a primary IPv4 address of the subinterface. By default, the numerically lowest value IPv4 address is selected as the primary address.  The primary address is used as the source address for locally originated broadcast and multicast packets sent out the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">primary</a>

<b>Tree</b>	<a href="#">primary</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**status** *keyword*

<b>Description</b>	The status of an IPv4 address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• preferred</li> <li>• inaccessible</li> <li>• tentative</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vrrp**

<b>Description</b>	VRRP Configuration and State under a IPv4 context of a sub-interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp</a>
<b>Tree</b>	<a href="#">vrrp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**vrrp-group** [virtual-router-id](#) *number*

<b>Description</b>	VRRP Group Specific Configuration under IPv4 context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i>
<b>Tree</b>	<a href="#">vrrp-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-router-id** *number*

<b>Description</b>	VRRP Group Index
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**accept-mode** *boolean*

<b>Description</b>	Allows ssh,ping,traceroute to be accepted on the virtual IP address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">accept-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">accept-mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state for the associated VRRP group instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-interval** *number*

<b>Description</b>	The interval between VRRP messages in milliseconds
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">advertise-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">advertise-interval</a>
<b>Range</b>	1000 to 40950
<b>Default</b>	1000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## authentication

<b>Description</b>	Context to configure authentication keychain
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## keychain *reference*

<b>Description</b>	Reference to a keychain. The keychain type must be md5 or clear-text
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">authentication</a> <a href="#">keychain</a> <i>reference</i>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication</a> <a href="#">keychain</a> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## current-master (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of node currently acting as VRRP master
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">current-master</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">current-master</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### init-delay *number*

**Description** Initialization delay in seconds before a router that just rebooted will preempt an existing master router. Only applicable if preempt is enabled

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [ipv4 address](#) *ip-prefix* *string* [vrrp vrrp-group](#) *virtual-router-id* *number* [init-delay](#) *number*

**Tree** [init-delay](#)

**Range** 1 to 65535

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-tracking

**Description** Interface reference for interface tracking

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [ipv4 address](#) *ip-prefix* *string* [vrrp vrrp-group](#) *virtual-router-id* *number* [interface-tracking](#)

**Tree** [interface-tracking](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### track-interface [interface](#) *reference*

**Description** Interface reference for interface tracking. VRRP Group can track multiple interfaces.

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [ipv4 address](#) *ip-prefix* *string* [vrrp vrrp-group](#) *virtual-router-id* *number* [interface-tracking](#) [track-interface](#) *interface* *reference*

**Tree** [track-interface](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface *reference***

<b>Description</b>	Interface to track
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">interface-tracking</a> <a href="#">track-interface</a> <a href="#">interface</a> <i>reference</i>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority-decrement *number***

<b>Description</b>	For each tracked interface that is down then the priority is decremented by the specific amount to a minimum value of 0
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">interface-tracking</a> <a href="#">track-interface</a> <a href="#">interface</a> <i>reference</i> <a href="#">priority-decrement</a> <i>number</i>
<b>Tree</b>	<a href="#">priority-decrement</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-transition *string***

<b>Description</b>	timestamp for last master router transition
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">last-transition</a> <i>string</i>
<b>Tree</b>	<a href="#">last-transition</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**master-inherit-interval *boolean***

<b>Description</b>	Learn VRRP advertisement interval from master
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">master-inherit-interval</a> <i>boolean</i>



<b>Tree</b>	<a href="#">master-inherit-interval</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason** *keyword*

<b>Description</b>	The first (and possibly only) reason for the vrrp-group being operationally down
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-down</li> <li>• sub-intf-down</li> <li>• virtual-ip-mismatch</li> <li>• authentication-config</li> <li>• other</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-interval** *number*

<b>Description</b>	The operational advertisement interval between VRRP messages
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">oper-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	VRRP Operational state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-priority** *number*

<b>Description</b>	Reports the current VRRP operational priority.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <b>operational-priority</b> <i>number</i>
<b>Tree</b>	<a href="#">operational-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**owner** *boolean*

<b>Description</b>	VRRP instance is owner or not
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <b>owner</b> <i>boolean</i>
<b>Tree</b>	<a href="#">owner</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**preempt** *boolean*

<b>Description</b>	Enable VRRP master pre-emption. If enabled, router with higher priority can assume master role. If disabled, router can only become master if no other master is present
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <b>preempt</b> <i>boolean</i>
<b>Tree</b>	<a href="#">preempt</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**preempt-delay** *number*

<b>Description</b>	Delay in seconds before a router preempts an existing master router, only applicable if preempt is enabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <b>preempt-delay</b> <i>number</i>
<b>Tree</b>	<a href="#">preempt-delay</a>

<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority number

<b>Description</b>	Base VRRP Priority for associated Virtual Address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <b>priority</b> <i>number</i>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	1 to 254
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### state identityref

<b>Description</b>	Virtual Router state (Initialize, Backup, Master)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <b>state</b> <i>identityref</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>initialize Indicates that the virtual router is waiting for a startup event.</li> <li>backup Indicates that the virtual router is monitoring the availability of the master router.</li> <li>master Indicates that the virtual router is forwarding packets for IP addresses that are associated with this virtual router.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Enter the statistics context
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-address-mismatch *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to address mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-discarded-address-mismatch</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-address-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-authfail *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to authentication failure
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-discarded-authfail</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-authfail</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-authtype-mismatch *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to authentication type mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-discarded-authtype-mismatch</a> <i>number</i>

<b>Tree</b>	<a href="#">advertisements-discarded-authype-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-interval *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to interval mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-interval</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-length *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to length of the packet
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-length</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-total *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages dicarded
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-total</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-total</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-ttl *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to ttl error
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-discarded-version-mismatch *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to version mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-version-mismatch</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-version-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-interval-error *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages with interval mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-interval-error</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-interval-error</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-received *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages received
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-received</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertisements-sent *number*

<b>Description</b>	Counter for the total number fo VRRP advertisement messages sent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority-zero-packets-received *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages received with priority 0
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">priority-zero-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">priority-zero-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority-zero-packets-sent *number*

**Description** Counter for the total numebr fo VRRP advertisement messages sent out with priority 0

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [statistics priority-zero-packets-sent](#) *number*

**Tree** [priority-zero-packets-sent](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### version *number*

**Description** VRRP version for the Instance

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [version](#) *number*

**Tree** [version](#)

**Range** 2 to 3

**Default** 2

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### virtual-address (*ipv4-address* | *ipv6-address*)

**Description** Associated Virtual IP address.

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [virtual-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [virtual-address](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 1

**virtual-mac** *string*

<b>Description</b>	VRRP Instance generated virtual mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">virtual-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">virtual-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Enable/disable IPv4 on the subinterface  When set to enable, and even before an IPv4 address is configured, the subinterface starts to accept incoming packets with dest-ip 255.255.255.255, which is necessary to support dhcp-client functionality.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**allow-directed-broadcast** *boolean*

<b>Description</b>	When this is set to true the software is allowed to re-broadcast targeted broadcast IPv4 packets on this subinterface  Detailed handling of subnet broadcast is as follows:  If a targeted broadcast packet is received on subinterface X that has the matching subnet then it is delivered to the CPM and CPM will reply to an ICMP echo.  If a targeted broadcast packet is received on subinterface X but the matching subnet is associated with subinterface Y, and subinterface Y is configured with allow-directed-broadcasts=false then it is delivered to the CPM and CPM replies to an ICMP echo per above, but it does not re-broadcast the packet on subinterface Y.  If a targeted broadcast packet is received on subinterface X but the matching subnet is associated with subinterface Y, and subinterface Y is configured
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with `allow-directed-broadcasts=true` then it is delivered to the CPM and CPM replies to an ICMP echo per above, and CPM also re-broadcasts the packet on subinterface Y.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 allow-directed-broadcast</a> <i>boolean</i>
<b>Tree</b>	<a href="#">allow-directed-broadcast</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## arp

<b>Description</b>	Container for the IPv4 ARP protocol
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp</a>
<b>Tree</b>	<a href="#">arp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## debug *keyword*

<b>Description</b>	List of events to debug
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp debug</a> <i>keyword</i>
<b>Tree</b>	<a href="#">debug</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>messages</code> Capture all arp-request and reply-messages sent and received by the subinterface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## duplicate-address-detection *boolean*

<b>Description</b>	If set to true IPv4 Address Conflict Detection per RFC 5227 is performed on the IPv4 address assigned to the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp duplicate-address-detection</a> <i>boolean</i>
<b>Tree</b>	<a href="#">duplicate-address-detection</a>
<b>Default</b>	true

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**evpn**

<b>Description</b>	Configure which types of ARP or ND entries will be advertised in EVPN MAC/IP routes.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise** [route-type](#) *keyword*

<b>Description</b>	Enter the advertise list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp evpn advertise route-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">advertise</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-type** *keyword*

<b>Description</b>	Controls what type of ARP or ND entries to advertise.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp evpn advertise route-type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4</a> <a href="#">arp</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4</a> <a href="#">arp</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i> <a href="#">internal-tags</a> <a href="#">set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">tag-set</a> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

**host-route**

<b>Description</b>	Configure which types of ARP or ND entries will be populated in the route-table.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4</a> <a href="#">arp</a> <a href="#">host-route</a>
<b>Tree</b>	<a href="#">host-route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**populate** [route-type](#) *keyword*

<b>Description</b>	Enter the populate list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4</a> <a href="#">arp</a> <a href="#">host-route</a> <a href="#">populate</a> <a href="#">route-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">populate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-type** *keyword*

<b>Description</b>	Controls what type of ARP or ND entries generate a host route.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp host-route populate route-type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**datapath-programming** *boolean*

<b>Description</b>	When set to true, the host route is programmed in the datapath
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp host-route populate route-type</a> <i>keyword</i> <a href="#">datapath-programming</a> <i>boolean</i>
<b>Tree</b>	<a href="#">datapath-programming</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp host-route populate route-type</a> <i>keyword</i> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp host-route populate route-type</a> <i>keyword</i> <a href="#">internal-tags set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **learn-unsolicited** *boolean*

<b>Description</b>	If set to true an ARP entry should be learned from any received ARP packets.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp learn-unsolicited</a> <i>boolean</i>
<b>Tree</b>	<a href="#">learn-unsolicited</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **neighbor** [ipv4-address](#) *string*

<b>Description</b>	List of static and dynamic ARP cache entries that map an IPv4 address to a MAC address  To configure a static ARP entry a value must be written into this leaf and the link-layer-address leaf.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **ipv4-address** *string*

<b>Description</b>	IPv4 address resolved by the ARP entry
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To configure a static neighbor entry a value must be written into this leaf and the link-layer-address leaf.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## datapath-programming

<b>Description</b>	Container for state related to the datapath programming of the ARP or neighbor entry
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i> <a href="#">datapath-programming</a>
<b>Tree</b>	<a href="#">datapath-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-failed-complexes *string*

<b>Description</b>	List of forwarding complexes that reported a failure for the last operation. They appear in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i> <a href="#">datapath-programming last-failed-complexes</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failed-complexes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## status *keyword*

<b>Description</b>	The status of the ARP or neighbor entry with respect to datapath programming
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i> <a href="#">datapath-programming status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• success All linecard complexes have reported that the entry was programmed successfully</li> <li>• failed</li> </ul>



At least one linecard complex reported that the entry was not programmed successfully or else this entry was not even provided to the datapath for programming because the system limit on the number of IPv4 ARP and IPv6 neighbor entries was exceeded

- pending

The ARP or neighbor entry was provided to the datapath for programming but at least one linecard complex has not provided a status yet.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### expiration-time *string*

<b>Description</b>	The date and time when the dynamic ARP entry is set to expire
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 arp neighbor ipv4-address string expiration-time string</a>
<b>Tree</b>	<a href="#">expiration-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### link-layer-address *string*

<b>Description</b>	The resolving MAC address of the ARP entry To configure a static ARP entry a value must be written into this leaf and the ipv4-address leaf.
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 arp neighbor ipv4-address string link-layer-address string</a>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### origin *keyword*

<b>Description</b>	The origin of the ARP entry
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 arp neighbor ipv4-address string origin keyword</a>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• other</li> </ul>

- static
- dynamic
- evpn

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### proxy-arp *boolean*

<b>Description</b>	When set to true, the router replies with its own MAC to ARP Request destined to any host.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp proxy-arp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">proxy-arp</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### timeout *number*

<b>Description</b>	Duration of time that dynamic ARP entries remain in the ARP cache before they expire  A change to this value does not affect existing entries until they are refreshed.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	60 to 65535
<b>Default</b>	14400
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### virtual-ipv4-discovery

<b>Description</b>	Enable Virtual IPv4 discovery on the subinterface and configure associated parameters
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When enabled, the system will attempt to discover the configured virtual IPv4 addresses on the listed bridged subinterfaces.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery</a>
<b>Tree</b>	<a href="#">virtual-ipv4-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** [ipv4-address](#) *string*

<b>Description</b>	The list of virtual IPv4 addresses to be discovered on the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery address ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	640

### **ipv4-address** *string*

<b>Description</b>	The virtual IPv4 address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery address ipv4-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **allowed-macs** *string*

<b>Description</b>	List of allowed mac addresses for a discovered virtual IP address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery address ipv4-address</a> <i>string</i> <a href="#">allowed-macs</a> <i>string</i>

<b>Tree</b>	<a href="#">allowed-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### probe-bridged-subinterfaces *string*

<b>Description</b>	Configure the list of bridged sub-interfaces on the associated MAC-VRF to which the ARP probes are sent.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery address</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">probe-bridged-subinterfaces</a> <i>string</i>
<b>Tree</b>	<a href="#">probe-bridged-subinterfaces</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### probe-interval *number*

<b>Description</b>	Configure the ARP probe interval at which the system sends an ARP request for the virtual IPv4 address.  The default value of zero determines that the system sends an ARP Request for the virtual IPv4 only when the address is configured. The creation of the ARP entry for the virtual IPv4 address will in this case rely on the server sending a Gratuitous ARP for the virtual IPv4 address. When the value is set to a non-zero interval, the system sends a periodic ARP Request at the configured interval and irrespective of the ARP entry being already created.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery address</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">probe-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-interval</a>
<b>Range</b>	0   5 to 86400
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Statistics for the Virtual IP address

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 arp virtual-ipv4-discovery address](#) [ipv4-address](#) *string* [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## out-probe-packets *number*

**Description** The number of probe packets transmitted for the Virtual IP discovery.

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 arp virtual-ipv4-discovery address](#) [ipv4-address](#) *string* [statistics out-probe-packets](#) *number*

**Tree** [out-probe-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Global statistics for Virtual IP discovery

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 arp virtual-ipv4-discovery statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-total-probe-packets** *number*

<b>Description</b>	The number of total probe packets transmitted for Virtual discovery.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery statistics out-total-probe-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-total-probe-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dhcp-client**

<b>Description</b>	Container for options related to DHCP
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-client</a>
<b>Tree</b>	<a href="#">dhcp-client</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **trace-options**

<b>Description</b>	Container for tracing DHCPv4 operations on the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-client trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **trace** *keyword*

<b>Description</b>	List of events to trace
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-client trace-options trace</a> <i>keyword</i>

<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>messages</li> </ul> Capture all DHCPv4 messages sent and received by the subinterface
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcp-relay

<b>Description</b>	Container for options related to DHCPv4 relay
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay</a>
<b>Tree</b>	<a href="#">dhcp-relay</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	The configurable state of the dhcp relay agent
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dns-resolution

<b>Description</b>	Enter the dns-resolution context
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay dns-resolution</a>
<b>Tree</b>	<a href="#">dns-resolution</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**server domain string**

<b>Description</b>	Reports the resolved IP address for server entries using domain names
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay dns-resolution server domain string</a>
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**domain string**

<b>Description</b>	The server domain name
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay dns-resolution server domain string</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-update string**

<b>Description</b>	The date and time of the last update of the server IP address
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay dns-resolution server domain string last-update string</a>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resolved-ip-address (ipv4-address | ipv6-address)**

<b>Description</b>	The resolved IP address of the server domain name. An entry of 0.0.0.0 indicates the server IP cannot be resolved.
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 dhcp-relay dns-resolution server domain string resolved-ip-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">resolved-ip-address</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **gi-address** *string*

**Description** IPv4 address to be used as giaddr of the relayed packets towards DHCPv4 servers. This address can be any IPv4 address configured within the network-instance towards the DHCPv4 server

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay gi-address](#) *string*

**Tree** [gi-address](#)

**Configurable** True

**Platforms** Supported on all platforms

### **network-instance** *reference*

**Description** network instance to relay dhcp packets to

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay network-instance](#) *reference*

**Tree** [network-instance](#)

**Reference** [network-instance name](#) *string*

**Configurable** True

**Platforms** Supported on all platforms

### **oper-down-reason** *keyword*

**Description** The reason causing the dhcp relay agent to go into operational down state

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay oper-down-reason](#) *keyword*

**Tree** [oper-down-reason](#)

**Options**

- dhcp-relay-admin-down
- sub-interface-oper-down
- all-dhcp-servers-unreachable-within-net-instance
- gi-address-not-matching-relay-sub-interface-ipv4-addresses
- no-valid-ipv4-address-on-sub-interface

**Configurable** False

**Platforms** Supported on all platforms

**oper-state keyword**

<b>Description</b>	The operational state of the dhcp relay agent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <a href="#">number</a> <a href="#">ipv4</a> <a href="#">dhcp-relay</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting</li></ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### option *keyword*

<b>Description</b>	List of option82 suboptions to insert into relayed packet towards DHCPv4 server
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-relay option keyword</a>
<b>Tree</b>	<a href="#">option</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>circuit-id</code> Enable option 82 suboption 1 <code>circuit-id</code> into relayed packet towards DHCPv4 server, format=<code>system_name/VRF_instance/sub-interface_id:vlan_id</code></li> <li>• <code>remote-id</code> Enable option 82 suboption 2 <code>remote-id</code> into relayed packet towards DHCPv4 server, format=<code>client MAC address</code></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### server (*ipv4-address* | *domain-name*)

<b>Description</b>	List of the DHCPv4 servers that the DHCPv4 relay function will relay DHCPv4 packets to/from
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-relay server</a> ( <i>ipv4-address</i>   <i>domain-name</i> )
<b>Tree</b>	<a href="#">server</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	8
<b>Min. Elements</b>	1

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 dhcp-relay</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-discarded** *number*

<b>Description</b>	Total discarded dhcp packets from dhcp client(s) towards DHCP server(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 dhcp-relay</a> <a href="#">statistics</a> <a href="#">client-packets-discarded</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-discarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-received** *number*

<b>Description</b>	Total received dhcp packets from dhcp client(s) for DHCP Relay
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 dhcp-relay</a> <a href="#">statistics</a> <a href="#">client-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-relayed** *number*

<b>Description</b>	Total relayed dhcp packets from dhcp client(s) towards DHCP server(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4 dhcp-relay</a> <a href="#">statistics</a> <a href="#">client-packets-relayed</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-relayed</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **server-packets-discarded** *number*

**Description** Total discarded dhcp packets from DHCP server(s) towards dhcp client(s)

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay statistics server-packets-discarded](#) *number*

**Tree** [server-packets-discarded](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **server-packets-received** *number*

**Description** Total received dhcp packets from DHCP server(s) for DHCP Relay

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay statistics server-packets-received](#) *number*

**Tree** [server-packets-received](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **server-packets-relayed** *number*

**Description** Total relayed dhcp packets from DHCP server(s) towards dhcp client(s)

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay statistics server-packets-relayed](#) *number*

**Tree** [server-packets-relayed](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **trace-options**

**Description** Container for tracing DHCPv4 relay operations on the subinterface

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 dhcp-relay trace-options](#)

<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**trace** *keyword*

<b>Description</b>	List of events to trace
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-relay trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">messages</a> Capture all DHCPv4 messages sent and received by the subinterface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**use-gi-addr-as-src-ip-addr** *boolean*

<b>Description</b>	When this is set, the configured giaddress will be used as source ip address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-relay use-gi-addr-as-src-ip-addr</a> <i>boolean</i>
<b>Tree</b>	<a href="#">use-gi-addr-as-src-ip-addr</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dhcp-server**

<b>Description</b>	Enable the dhcp-server context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-server</a>
<b>Tree</b>	<a href="#">dhcp-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Enables/Disables DHCP server function on subinterface
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-server admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	Details if the dhcp server is operationally available
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-server oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded</li> </ul>

Component or process is in a degraded state

- warm-reboot

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

## statistics

**Description**

Container for subinterface statistics, including all IPv4, IPv6 and MPLS packets belonging to a routed subinterface, or including just one of these protocols on a routed subinterface, or for all frames on a bridged subinterface

**Context**

[interface name](#) *string* [subinterface index](#) *number* [ipv4 statistics](#)

**Tree**

[statistics](#)

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-discarded-packets *number*

**Description**

The total number of input packets that were dropped due to explicit programming

The discards can be due to any of the following reasons

In an MPLS context, this includes the total number of MPLS packets that were dropped because they were received with forwarded top label having an MPLS TTL value of 1

**Context**

[interface name](#) *string* [subinterface index](#) *number* [ipv4 statistics](#) [in-discarded-packets](#) *number*

**Tree**

[in-discarded-packets](#)

**Default**

0

**Configurable**

False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-error-packets** *number*

**Description** The total number of input packets discarded due to errors, counting transit and terminating traffic

In an IP context, the sum of the following RFC 4293 counters: ipIfStatsInHdrErrors ipIfStatsInNoRoutes ipIfStatsInAddrErrors ipIfStatsInUnknownProtos ipIfStatsInTruncatedPkts

In an MPLS context, the total number of MPLS packets that were dropped because:

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 statistics in-error-packets](#) *number*

**Tree** [in-error-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-forwarded-octets** *number*

**Description** The number of octets in packets received on this subinterface counted in in-forwarded-packets

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv4 statistics in-forwarded-octets](#) *number*

**Tree** [in-forwarded-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-forwarded-packets** *number*

**Description** The number of packets received on this subinterface for which the router was not the final destination and for which the router attempted to find a route to forward them to that final destination.

Note that non-terminating IPv4 packets with options and non-terminating IPv6 packets with extension headers are included in this count as are packets that trigger ICMP/ICMPv6 redirect messages.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-matched-ra-packets** *number*

<b>Description</b>	The total number of IPv6 packets matched with applied RA-Guard policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-matched-ra-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-matched-ra-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-octets** *number*

<b>Description</b>	The total number of octets received in input packets, counting transit and terminating traffic
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-packets** *number*

<b>Description</b>	The total number of input packets received, counting transit and terminating traffic  This equals the sum of: in-error-packets in-discarded-packets in-terminated-packets in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-packets</a> <i>number</i>

<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-terminated-octets** *number*

<b>Description</b>	The total number of octets in packets that were received on this subinterface and counted in in-terminated-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-terminated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-terminated-packets** *number*

<b>Description</b>	The total number of input packets that were received on this subinterface that were extracted to the control plane  The count includes packets eventually discarded by the CPM. Such discards include:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics in-terminated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Timestamp of the last time the subinterface counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-discarded-packets** *number*

<b>Description</b>	The total number of packets, originating and transit, that should have been sent out this subinterface but were dropped  This includes IP packets dropped by egress interface ACL drop action.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-error-packets** *number*

<b>Description</b>	The number of packets, originating and transit, for which this router was successful in finding a path to their final destination through this subinterface but an error prevented their transmission  On 7250 IXR systems this is incremented when the IPv4 packet size exceeds the IP MTU and fragmentation was not allowed or not supported. It is also incremented when the MPLS packet size exceeds the MPLS MTU of the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-forwarded-octets** *number*

<b>Description</b>	The number of octets in transit packets which the router attempted to forward out this subinterface
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-forwarded-packets** *number*

<b>Description</b>	The number of transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-octets** *number*

<b>Description</b>	The total number of octets in packets delivered to the lower layers for transmission
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-originated-octets** *number*

<b>Description</b>	The number of octets in packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-originated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-originated-octets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-originated-packets *number*

<b>Description</b>	The number of packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-originated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-originated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-packets *number*

<b>Description</b>	The total number of packets that this router supplied to the lower layers for transmission  This equals the sum of: out-error-packets out-discarded-packets out-originated-packets out-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 statistics out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6

<b>Description</b>	IPv6 configuration and state for the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**address** *ip-prefix string*

<b>Description</b>	The list of IPv6 addresses assigned to the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	18

**ip-prefix** *string*

<b>Description</b>	The IPv6 address and prefix-length in CIDR notation  Up to 16 global unicast IPv6 addresses can be assigned to each subinterface. Global unicast IPv6 address subnets on the same subinterface are allowed to overlap as long as the host bits are different. When a locally originated unicast packet is destined to a host covered by multiple subnets associated with a subinterface, the source address is chosen to be the numerically lowest IP address among all these subnets.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**anycast-gw** *boolean*

<b>Description</b>	This designates the associated IPv6 address as an anycast-gateway IPv6 address of the subinterface.  When this parameter is set to true:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">anycast-gw</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anycast-gw</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin** *keyword*

<b>Description</b>	The origin of the IPv6 address
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• other</li> <li>• static</li> <li>• dhcp</li> <li>• link-layer</li> <li>• random</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## primary

<b>Description</b>	<p>One of the IPv6 prefixes assigned to the subinterface can be explicitly configured as primary by setting this leaf to true. This designates the associated IPv6 address as a primary IPv6 address of the subinterface. By default, the numerically lowest value IPv6 address is selected as the primary address.</p> <p>The primary address is used as the source address for locally originated broadcast and multicast packets sent out the subinterface.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">primary</a>
<b>Tree</b>	<a href="#">primary</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## status *keyword*

<b>Description</b>	The status of an IPv6 address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• preferred</li> <li>• deprecated</li> <li>• invalid</li> <li>• inaccessible</li> <li>• unknown</li> <li>• tentative</li> </ul>



	<ul style="list-style-type: none"> <li>• duplicate</li> <li>• optimistic</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type keyword**

<b>Description</b>	<p>Specifies the explicit type of the IPv6 address being assigned to the subinterface</p> <p>By default, addresses are assumed to be global unicast. Where a link-local address is to be explicitly configured, this leaf should be set to link-local.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">type keyword</a>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	global-unicast
<b>Options</b>	<ul style="list-style-type: none"> <li>• global-unicast           <p>The IPv6 address is a global unicast address type and must be in the format defined in RFC 4291 section 2.4.</p> </li> <li>• link-local-unicast           <p>The IPv6 address is a Link-Local unicast address type and must be in the format defined in RFC 4291 section 2.4.</p> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**vrrp**

<b>Description</b>	VRRP Configuration and State under a IPv6 context of a sub-interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp</a>
<b>Tree</b>	<a href="#">vrrp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**vrrp-group** [virtual-router-id](#) *number*

<b>Description</b>	VRRP Group Specific Configuration under IPv6 context
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i>
<b>Tree</b>	<a href="#">vrrp-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-router-id** *number*

<b>Description</b>	VRRP Group Index
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**accept-mode** *boolean*

<b>Description</b>	Allows ssh,ping,traceroute to be accepted on the virtual IP address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">accept-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">accept-mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state for the associated VRRP group instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertise-interval *number*

**Description** The interval between VRRP messages in milliseconds

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [advertise-interval](#) *number*

**Tree** [advertise-interval](#)

**Range** 1000 to 40950

**Default** 1000

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### authentication

**Description** Context to configure authentication keychain

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [authentication](#)

**Tree** [authentication](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### keychain *reference*

**Description** Reference to a keychain. The keychain type must be md5 or clear-text

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [authentication keychain](#) *reference*

**Tree** [keychain](#)

**Reference** [system authentication keychain name](#) *string*

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-master** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of node currently acting as VRRP master
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <b>current-master</b> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">current-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**init-delay** *number*

<b>Description</b>	Initialization delay in seconds before a router that just rebooted will preempt an existing master router. Only applicable if preempt is enabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <b>init-delay</b> <i>number</i>
<b>Tree</b>	<a href="#">init-delay</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-tracking**

<b>Description</b>	Interface reference for interface tracking
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <b>interface-tracking</b>
<b>Tree</b>	<a href="#">interface-tracking</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**track-interface** [interface](#) *reference*

<b>Description</b>	Interface reference for interface tracking. VRRP Group can track multiple interfaces.
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">interface-tracking track-interface interface</a> <i>reference</i>
<b>Tree</b>	<a href="#">track-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *reference*

<b>Description</b>	Interface to track
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">interface-tracking track-interface interface</a> <i>reference</i>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority-decrement** *number*

<b>Description</b>	For each tracked interface that is down then the priority is decremented by the specific amount to a minimum value of 0
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">interface-tracking track-interface interface</a> <i>reference</i> <a href="#">priority-decrement</a> <i>number</i>
<b>Tree</b>	<a href="#">priority-decrement</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-transition** *string*

<b>Description</b>	timestamp for last master router transition
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">last-transition</a> <i>string</i>
<b>Tree</b>	<a href="#">last-transition</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### master-inherit-interval *boolean*

**Description** Learn VRRP advertisement interval from master

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [master-inherit-interval](#) *boolean*

**Tree** [master-inherit-interval](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-down-reason *keyword*

**Description** The first (and possibly only) reason for the vrrp-group being operationally down

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [oper-down-reason](#) *keyword*

**Tree** [oper-down-reason](#)

**Options**

- admin-down
- sub-intf-down
- virtual-ip-mismatch
- authentication-config
- other

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-interval *number*

**Description** The operational advertisement interval between VRRP messages

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 address ip-prefix](#) *string* [vrrp vrrp-group virtual-router-id](#) *number* [oper-interval](#) *number*

**Tree** [oper-interval](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

**Description** VRRP Operational state

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [ipv6 address](#) *ip-prefix* *string* [vrrp vrrp-group virtual-router-id](#) *number* **oper-state** *keyword*

**Tree** [oper-state](#)

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-priority** *number*

<b>Description</b>	Reports the current VRRP operational priority.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">operational-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **owner** *boolean*

<b>Description</b>	VRRP instance is owner or not
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">owner</a> <i>boolean</i>
<b>Tree</b>	<a href="#">owner</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **preempt** *boolean*

<b>Description</b>	Enable VRRP master pre-emption. If enabled, router with higher priority can assume master role. If disabled, router can only become master if no other master is present
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">preempt</a> <i>boolean</i>
<b>Tree</b>	<a href="#">preempt</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**preempt-delay** *number*

<b>Description</b>	Delay in seconds before a router preempts an existing master router, only applicable if preempt is enabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">preempt-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">preempt-delay</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority** *number*

<b>Description</b>	Base VRRP Priority for associated Virtual Address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">priority</a> <i>number</i>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	1 to 254
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *identityref*

<b>Description</b>	Virtual Router state (Initialize, Backup, Master)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">state</a> <i>identityref</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>initialize Indicates that the virtual router is waiting for a startup event.</li> <li>backup Indicates that the virtual router is monitoring the availability of the master router.</li> <li>master Indicates that the virtual router is forwarding packets for IP addresses that are associated with this virtual router.</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertisements-discarded-address-mismatch *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to address mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-address-mismatch</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-address-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertisements-discarded-authfail *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to authentication failure
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-authfail</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-authfail</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-authype-mismatch** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to authentication type mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <i>virtual-router-id</i> <i>number</i> <a href="#">statistics advertisements-discarded-authype-mismatch</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-authype-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-interval** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to interval mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <i>virtual-router-id</i> <i>number</i> <a href="#">statistics advertisements-discarded-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-interval</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-length** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to length of the packet
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <i>ip-prefix</i> <i>string</i> <a href="#">vrrp vrrp-group</a> <i>virtual-router-id</i> <i>number</i> <a href="#">statistics advertisements-discarded-length</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-total** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages dicarded
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-total</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-total</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-ttl** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to ttl error
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-discarded-version-mismatch** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages discarded due to version mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <i>address</i> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp</a> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">advertisements-discarded-version-mismatch</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-discarded-version-mismatch</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-interval-error** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages with interval mismatch
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-interval-error</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-interval-error</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-received** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages received
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-received</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertisements-sent** *number*

<b>Description</b>	Counter for the total number fo VRRP advertisement messages sent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics advertisements-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">advertisements-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority-zero-packets-received** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages received with priority 0
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics priority-zero-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">priority-zero-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority-zero-packets-sent** *number*

<b>Description</b>	Counter for the total numebr fo VRRP advertisement messages sent out with priority 0
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics priority-zero-packets-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">priority-zero-packets-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version** *number*

<b>Description</b>	VRRP version for the Instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">version</a> <i>number</i>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	2 to 3
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-address** *string*

<b>Description</b>	Associated Virtual IP address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">virtual-address</a> <i>string</i>
<b>Tree</b>	<a href="#">virtual-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**virtual-link-local-address** *string*

<b>Description</b>	Generated link local address based on virtual-mac for virtual router instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">virtual-link-local-address</a> <i>string</i>
<b>Tree</b>	<a href="#">virtual-link-local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-mac** *string*

<b>Description</b>	VRRP Instance generated virtual mac
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 address ip-prefix</a> <i>string</i> <a href="#">vrrp vrrp-group virtual-router-id</a> <i>number</i> <a href="#">virtual-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">virtual-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Enable/disable IPv6 on the subinterface  When set to enable, and even before a global unicast IPv6 address is configured, chassis manager assigns an IPv6 link-local address to the subinterface, which will appear as a read-only entry in the address list. At this stage, the subinterface can receive IPv6 packets with any of the following destinations:
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcp-client

<b>Description</b>	Container for options related to DHCPv6
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-client</a>
<b>Tree</b>	<a href="#">dhcp-client</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## trace-options

<b>Description</b>	Container for tracing DHCPv6 operations on the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-client trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## trace *keyword*

<b>Description</b>	List of events to trace
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-client trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• messages Capture all DHCPv6 messages sent and received by the subinterface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## dhcp-relay

<b>Description</b>	Container for options related to DHCPv6 relay
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a>
<b>Tree</b>	<a href="#">dhcp-relay</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	The configurable state of the dhcp relay agent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dns-resolution

<b>Description</b>	Enter the dns-resolution context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a> <a href="#">dns-resolution</a>
<b>Tree</b>	<a href="#">dns-resolution</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## server [domain](#) *string*

<b>Description</b>	Reports the resolved IP address for server entries using domain names
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a> <a href="#">dns-resolution</a> <a href="#">server</a> <a href="#">domain</a> <i>string</i>
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### domain *string*

**Description** The server domain name

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 dhcp-relay dns-resolution server domain](#) *string*

**String Length** 1 to 253

**Configurable** False

**Platforms** Supported on all platforms

### last-update *string*

**Description** The date and time of the last update of the server IP address

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 dhcp-relay dns-resolution server domain](#) *string* [last-update](#) *string*

**Tree** [last-update](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### resolved-ip-address (*ipv4-address* | *ipv6-address*)

**Description** The resolved IP address of the server domain name.  
An entry of 0.0.0.0 indicates the server IP cannot be resolved.

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 dhcp-relay dns-resolution server domain](#) *string* [resolved-ip-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [resolved-ip-address](#)

**Configurable** False

**Platforms** Supported on all platforms

### network-instance *reference*

**Description** network instance to relay dhcp packets to

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 dhcp-relay network-instance](#) *reference*

<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-down-reason** *keyword*

<b>Description</b>	The reason causing the dhcp relay agent to go into operational down state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• dhcp-relay-admin-down</li> <li>• sub-interface-oper-down</li> <li>• all-dhcpv6-servers-unreachable-within-net-instance</li> <li>• source-address-not-matching-relay-sub-interface-ipv6-addresses</li> <li>• no-valid-ipv6-address-on-sub-interface</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	The operational state of the dhcp relay agent
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting</li> </ul>

- Component image operational, application processes starting
- failed
  - Component or process has failed
- synchronizing
  - Component is currently being synchronized
- upgrading
  - Component is currently being upgraded
- low-power
  - Component is offline due to insufficient system power
- degraded
  - Component or process is in a degraded state
- warm-reboot
  - Component or process is currently warm rebooting
  - This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
  - Component or process is currently waiting
  - This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**option keyword****Description**

List of options to insert into relayed packet towards DHCPv6 server

**Context**[interface name](#) *string* [subinterface](#) *index* *number* [ipv6 dhcp-relay option](#) *keyword***Tree**[option](#)**Options**

- interface-id
  - Enable option 18 Interface-Id into relayed packet towards DHCPv6 server, format=system\_name/VRF\_instance/sub-interface\_id:vlan\_id
- remote-id
  - Enable option 37 Remote Identifier into relayed packet towards DHCPv6 server, format=client MAC address
- client-link-layer-address

Enable option 79 Client Link-Layer Address into relayed packet towards DHCPv6 server, format based on rfc-6939

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **server** (*ipv6-address* | *domain-name*)

<b>Description</b>	List of the DHCPv6 servers that the DHCPv6 relay function will relay DHCPv6 packets to/from
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay server</a> ( <i>ipv6-address</i>   <i>domain-name</i> )
<b>Tree</b>	<a href="#">server</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	8
<b>Min. Elements</b>	1

### **source-address** *string*

<b>Description</b>	Source IPv6 address of the relayed packets towards DHCPv6 servers this address can be any IPv6 address configured within the network-instance towards the DHCPv6 server
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay source-address</a> <i>string</i>
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-discarded** *number*

<b>Description</b>	Total discarded dhcp packets from dhcp client(s) towards DHCP server(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics</a> <a href="#">client-packets-discarded</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-discarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-received** *number*

<b>Description</b>	Total received dhcp packets from dhcp client(s) for DHCP Relay
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics</a> <a href="#">client-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-relayed** *number*

<b>Description</b>	Total relayed dhcp packets from dhcp client(s) towards DHCP server(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics</a> <a href="#">client-packets-relayed</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-relayed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**server-packets-discarded** *number*

<b>Description</b>	Total discarded dhcp packets from DHCP server(s) towards dhcp client(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics</a> <a href="#">server-packets-discarded</a> <i>number</i>
<b>Tree</b>	<a href="#">server-packets-discarded</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### server-packets-received *number*

<b>Description</b>	Total received dhcp packets from DHCP server(s) for DHCP Relay
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics server-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">server-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### server-packets-relayed *number*

<b>Description</b>	Total relayed dhcp packets from DHCP server(s) towards dhcp client(s)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay statistics server-packets-relayed</a> <i>number</i>
<b>Tree</b>	<a href="#">server-packets-relayed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### trace-options

<b>Description</b>	Container for tracing DHCPv6 relay operations on the subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace *keyword*

<b>Description</b>	List of events to trace
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 dhcp-relay trace-options trace</a> <i>keyword</i>

<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>messages Capture all DHCPv6 messages sent and received by the subinterface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcpv6-server

<b>Description</b>	Enable the dhcpv6-server context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcpv6-server</a>
<b>Tree</b>	<a href="#">dhcpv6-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	Enables/Disables DHCPv6 server function on subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcpv6-server</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## oper-state *keyword*

<b>Description</b>	Details if the dhcp server is operationally available
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcpv6-server</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> </ul>



- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**neighbor-discovery****Description**

Container for the IPv6 Neighbor Discovery protocol

**Context**[interface name](#) *string* [subinterface index](#) *number* [ipv6 neighbor-discovery](#)**Tree**[neighbor-discovery](#)**Configurable**

True

**Platforms** Supported on all platforms

### **debug** *keyword*

**Description** List of events to debug

**Context** [interface name](#) *string* [subinterface index number](#) [ipv6 neighbor-discovery debug](#) *keyword*

**Tree** [debug](#)

**Options**

- messages

Capture all neighbor-solicitation and neighbor-advertisement messages sent and received by the subinterface

**Configurable** True

**Platforms** Supported on all platforms

### **duplicate-address-detection** *boolean*

**Description** Enables Duplicate Address Detection on all tentative addresses  
This applies to link-local and global unicast addresses. Only one transmission is done; there are no retransmissions.  
Must be true on an IPv6 subinterface that has dhcp-client enabled.

**Context** [interface name](#) *string* [subinterface index number](#) [ipv6 neighbor-discovery duplicate-address-detection](#) *boolean*

**Tree** [duplicate-address-detection](#)

**Default** true

**Configurable** True

**Platforms** Supported on all platforms

### **evpn**

**Description** Configure which types of ARP or ND entries will be advertised in EVPN MAC/IP routes.

**Context** [interface name](#) *string* [subinterface index number](#) [ipv6 neighbor-discovery evpn](#)

**Tree** [evpn](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise** *route-type keyword*

<b>Description</b>	Enter the advertise list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">advertise</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-type** *keyword*

<b>Description</b>	Controls what type of ARP or ND entries to advertise.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">evpn</a> <a href="#">advertise</a> <a href="#">route-type</a> <i>keyword</i> <a href="#">internal-tags</a> <a href="#">set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>

<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

## host-route

<b>Description</b>	Configure which types of ARP or ND entries will be populated in the route-table.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route</a>
<b>Tree</b>	<a href="#">host-route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## populate [route-type](#) *keyword*

<b>Description</b>	Enter the populate list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route populate route-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">populate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## [route-type](#) *keyword*

<b>Description</b>	Controls what type of ARP or ND entries generate a host route.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route populate route-type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**datapath-programming** *boolean*

<b>Description</b>	When set to true, the host route is programmed in the datapath
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route populate route-type</a> <i>keyword</i> <a href="#">datapath-programming</a> <i>boolean</i>
<b>Tree</b>	<a href="#">datapath-programming</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route populate route-type</a> <i>keyword</i> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery host-route populate route-type</a> <i>keyword</i> <a href="#">internal-tags set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**learn-unsolicited** *keyword*

<b>Description</b>	Sets if neighbors should be learned from unsolicited neighbor advertisements for global or link local addresses or both.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery learn-unsolicited</a> <i>keyword</i>
<b>Tree</b>	<a href="#">learn-unsolicited</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• global</li> <li>• link-local</li> <li>• both</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**limit**

<b>Description</b>	Container for the configuration of Neighbor-Discovery limit
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery limit</a>
<b>Tree</b>	<a href="#">limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**log-only** *boolean*

<b>Description</b>	<p>Generate only a log message when limit is reached</p> <p>When set to true, neighbor entries are still being learned after exceeding the max-entries limit.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery limit log-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">log-only</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-entries** *number*

<b>Description</b>	The maximum number of neighbor entries allowed on the subinterface If not configured, the amount of neighbor entries on the subinterface is only limited by the total amount of entries supported by the router.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery limit max-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">max-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**warning-threshold-pct** *number*

<b>Description</b>	Threshold percentage of the configured maximum number of entries When exceeded, an event is triggered.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery limit warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	1 to 100
<b>Default</b>	90
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor** [ipv6-address](#) *string*

<b>Description</b>	List of static and dynamic ND cache entries that map an IPv6 address to a MAC address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-address** *string*

<b>Description</b>	IPv6 address resolved by the ND cache entry
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To configure a static neighbor entry a value must be written into this leaf and the link-layer-address leaf.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **current-state** *keyword*

<b>Description</b>	The Neighbor Unreachability Detection state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">current-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">current-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• incomplete</li> <li>• reachable</li> <li>• stale</li> <li>• delay</li> <li>• probe</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **datapath-programming**

<b>Description</b>	Container for state related to the datapath programming of the ARP or neighbor entry
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">datapath-programming</a>
<b>Tree</b>	<a href="#">datapath-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-failed-complexes** *string*

<b>Description</b>	List of forwarding complexes that reported a failure for the last operation. They appear in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">datapath-programming last-failed-complexes</a> <i>string</i>



<b>Tree</b>	<a href="#">last-failed-complexes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**status** *keyword*

<b>Description</b>	The status of the ARP or neighbor entry with respect to datapath programming
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i> <a href="#">datapath-programming status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• success All linecard complexes have reported that the entry was programmed successfully</li> <li>• failed At least one linecard complex reported that the entry was not programmed successfully or else this entry was not even provided to the datapath for programming because the system limit on the number of IPv4 ARP and IPv6 neighbor entries was exceeded</li> <li>• pending The ARP or neighbor entry was provided to the datapath for programming but at least one linecard complex has not provided a status yet.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**is-router** *boolean*

<b>Description</b>	Indicates that the neighbor node claims to be a router (R bit in the Neighbor Advertisement message)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i> <a href="#">is-router</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the ND cache entry
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To configure a static neighbor entry a value must be written into this leaf and the ipv6-address leaf.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **next-state-time** *string*

<b>Description</b>	The date and time when the neighbor state is expected to transition to the next state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i> <a href="#">next-state-time</a> <i>string</i>
<b>Tree</b>	<a href="#">next-state-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **origin** *keyword*

<b>Description</b>	The origin of the neighbor cache entry.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery neighbor ipv6-address</a> <i>string</i> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• other</li> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **proxy-nd** *boolean*

<b>Description</b>	When set to true, the router replies with its own MAC to Neighbor Solicitations destined to any host.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery proxy-nd</a> <i>boolean</i>

<b>Tree</b>	<a href="#">proxy-nd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reachable-time *number*

<b>Description</b>	The period of time that a dynamic IPv6 neighbor cache entry is considered reachable after a reachability confirmation event After this time expires the neighbor state moves to STALE.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery reachable-time</a> <i>number</i>
<b>Tree</b>	<a href="#">reachable-time</a>
<b>Range</b>	30 to 3600
<b>Default</b>	30
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### stale-time *number*

<b>Description</b>	The maximum time that a dynamic IPv6 neighbor cache entry can remain in the STALE state before it is removed This limit is reached only if no traffic is sent/queued towards the neighbor during the entire duration of the timer.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery stale-time</a> <i>number</i>
<b>Tree</b>	<a href="#">stale-time</a>
<b>Range</b>	60 to 65535
<b>Default</b>	14400
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**virtual-ipv6-discovery**

<b>Description</b>	Enable Virtual IPv6 discovery on the subinterface and configure associated parameters  When enabled, the system will attempt to discover the configured virtual IPv6 addresses on the listed bridged subinterfaces.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery</a>
<b>Tree</b>	<a href="#">virtual-ipv6-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address [ipv6-address](#) *string***

<b>Description</b>	The list of virtual IPv6 addresses to be discovered on the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	640

**[ipv6-address](#) *string***

<b>Description</b>	The virtual IPv6 address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address ipv6-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**allowed-macs** *string*

<b>Description</b>	List of allowed mac addresses for a discovered virtual IP address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">allowed-macs</a> <i>string</i>
<b>Tree</b>	<a href="#">allowed-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

**probe-bridged-subinterfaces** *string*

<b>Description</b>	Configure the list of bridged sub-interfaces on the associated MAC-VRF to which the NS probes are sent.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">probe-bridged-subinterfaces</a> <i>string</i>
<b>Tree</b>	<a href="#">probe-bridged-subinterfaces</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

**probe-interval** *number*

<b>Description</b>	<p>Configure the probe interval at which the system sends a Neighbor Solicitation (NS) for the virtual IPv6 address.</p> <p>The default value of zero determines that the system sends a NS for the virtual IPv6 only when the address is configured. The creation of the Neighbor entry for the virtual IPv6 address will in this case rely on the server sending an unsolicited Neighbor Advertisement for the virtual IPv6 address. When the value is set to a non-zero interval, the system sends a periodic NS at the configured interval and irrespective of the Neighbor entry being already created.</p>
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">probe-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-interval</a>
<b>Range</b>	0   5 to 86400
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Statistics for the Virtual IP address
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## out-probe-packets *number*

<b>Description</b>	The number of probe packets transmitted for the Virtual IP discovery.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">statistics out-probe-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-probe-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Global statistics for Virtual IP discovery
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-total-probe-packets** *number*

<b>Description</b>	The number of total probe packets transmitted for Virtual discovery.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery statistics out-total-probe-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-total-probe-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-advertisement**

<b>Description</b>	Container for configuring IPv6 router discovery options
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement</a>
<b>Tree</b>	<a href="#">router-advertisement</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**debug** *keyword*

<b>Description</b>	List of events to debug
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement debug</a> <i>keyword</i>

<b>Tree</b>	<a href="#">debug</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• messages</li> </ul> <p>Capture all router-solicitation and router-advertisement messages sent and received by the subinterface</p>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### router-role

<b>Description</b>	IPv6 router advertisement options that apply when the role of the interface is a router interface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a>
<b>Tree</b>	<a href="#">router-role</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### admin-state *keyword*

<b>Description</b>	Administratively enable or disable the sending of router advertisements on the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### current-hop-limit *number*

<b>Description</b>	The current hop limit to advertise in the router advertisement messages.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">current-hop-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">current-hop-limit</a>
<b>Default</b>	64



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ip-mtu** *number*

<b>Description</b>	The IP MTU to advertise in the router advertisement messages and that hosts should associate with the link on which these messages are received. If no value is specified the option is not included.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role ip-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">ip-mtu</a>
<b>Range</b>	1280 to 9486
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**managed-configuration-flag** *boolean*

<b>Description</b>	When this is set the M-bit is set in the router advertisement messages, indicating that hosts should use DHCPv6 to obtain IPv6 addresses.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role managed-configuration-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">managed-configuration-flag</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-advertisement-interval** *number*

<b>Description</b>	The maximum time between sending router advertisement messages to the all-nodes multicast address. Each subinterface has its own timer. Whenever the timer fires the message is sent and then the timer is reset to a uniformly distributed random value between min-advertisement-interval and max-advertisement-interval. The RA message can be sent before timer expiry in response to a RS message.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role max-advertisement-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">max-advertisement-interval</a>
<b>Range</b>	4 to 1800

<b>Default</b>	600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **min-advertisement-interval** *number*

<b>Description</b>	The minimum time between sending router advertisement messages to the all-nodes multicast address.  Each subinterface has its own timer. Whenever the timer fires the message is sent and then the timer is reset to a uniformly distributed random value between min-advertisement-interval and max-advertisement-interval. The RA message can be sent before timer expiry in response to a RS message.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role</a> <a href="#">min-advertisement-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">min-advertisement-interval</a>
<b>Range</b>	3 to 1350
<b>Default</b>	200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **other-configuration-flag** *boolean*

<b>Description</b>	When this is set the O-bit is set in the router advertisement messages, indicating that hosts should use DHCPv6 to obtain other configuration information (besides addresses).
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role</a> <a href="#">other-configuration-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">other-configuration-flag</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **prefix** [ipv6-prefix](#) *string*

<b>Description</b>	The list of IPv6 prefixes to advertise in the router advertisement messages.
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">prefix</a> <a href="#">ipv6-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	16

**ipv6-prefix** *string*

<b>Description</b>	An IPv6 global unicast address prefix.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">prefix</a> <a href="#">ipv6-prefix</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**autonomous-flag** *boolean*

<b>Description</b>	When this is set in the prefix information option hosts can use the prefix for stateless address autoconfiguration (SLAAC).
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">prefix</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">autonomous-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">autonomous-flag</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**on-link-flag** *boolean*

<b>Description</b>	When this is set in the prefix information option hosts can use the prefix for on-link determination.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">router-role</a> <a href="#">prefix</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">on-link-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">on-link-flag</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**preferred-lifetime** (*keyword* | *number*)

<b>Description</b>	The length of time in seconds (relative to the time the packet is sent) that addresses generated from the prefix via stateless address autoconfiguration remain preferred.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role prefix</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">preferred-lifetime</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">preferred-lifetime</a>
<b>Default</b>	604800
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>infinite</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**valid-lifetime** (*keyword* | *number*)

<b>Description</b>	The length of time in seconds (relative to the time the packet is sent) that the prefix is valid for the purpose of on-link determination.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role prefix</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">valid-lifetime</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">valid-lifetime</a>
<b>Default</b>	2592000
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>infinite</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reachable-time** *number*

<b>Description</b>	The time, in milliseconds, that is advertised as the reachable time in RA messages and that hosts use for the ICMPv6 Neighbor Unreachability Detection algorithm. A value of zero means unspecified by this router.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role</a> <a href="#">reachable-time</a> <i>number</i>
<b>Tree</b>	<a href="#">reachable-time</a>
<b>Range</b>	0 to 3600000
<b>Default</b>	0

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### retransmit-time *number*

<b>Description</b>	The time, in milliseconds, that is advertised as the retrans-timer in RA messages and that hosts use for address resolution and the Neighbor Unreachability Detection algorithm. It represents the time between retransmitted NS messages. A value of zero means unspecified by this router.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role retransmit-time</a> <i>number</i>
<b>Tree</b>	<a href="#">retransmit-time</a>
<b>Range</b>	0 to 1800000
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### router-lifetime *number*

<b>Description</b>	The lifetime in seconds that is advertised as the router lifetime in RA messages. This indicates the time period for which the advertising router can be used as a default router/gateway. A value of 0 means the router should not be used as a default gateway.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 router-advertisement router-role router-lifetime</a> <i>number</i>
<b>Tree</b>	<a href="#">router-lifetime</a>
<b>Range</b>	0 to 9000
<b>Default</b>	1800
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	Container for subinterface statistics, including all IPv4, IPv6 and MPLS packets belonging to a routed subinterface, or including just one of these protocols on a routed subinterface, or for all frames on a bridged subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics</a>

<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-discarded-packets** *number*

<b>Description</b>	<p>The total number of input packets that were dropped due to explicit programming</p> <p>The discards can be due to any of the following reasons</p> <p>In an MPLS context, this includes the total number of MPLS packets that were dropped because they were received with forwarded top label having an MPLS TTL value of 1</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-error-packets** *number*

<b>Description</b>	<p>The total number of input packets discarded due to errors, counting transit and terminating traffic</p> <p>In an IP context, the sum of the following RFC 4293 counters: ipIfStatsInHdrErrors ipIfStatsInNoRoutes ipIfStatsInAddrErrors ipIfStatsInUnknownProtos ipIfStatsInTruncatedPkts</p> <p>In an MPLS context, the total number of MPLS packets that were dropped because:</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-forwarded-octets** *number*

<b>Description</b>	The number of octets in packets received on this subinterface counted in in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-forwarded-packets** *number*

<b>Description</b>	The number of packets received on this subinterface for which the router was not the final destination and for which the router attempted to find a route to forward them to that final destination.  Note that non-terminating IPv4 packets with options and non-terminating IPv6 packets with extension headers are included in this count as are packets that trigger ICMP/ICMPv6 redirect messages.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-matched-ra-packets** *number*

<b>Description</b>	The total number of IPv6 packets matched with applied RA-Guard policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-matched-ra-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-matched-ra-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-octets** *number*

<b>Description</b>	The total number of octets received in input packets, counting transit and terminating traffic
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-packets** *number*

<b>Description</b>	The total number of input packets received, counting transit and terminating traffic  This equals the sum of: in-error-packets in-discarded-packets in-terminated-packets in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-terminated-octets** *number*

<b>Description</b>	The total number of octets in packets that were received on this subinterface and counted in in-terminated-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-terminated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**in-terminated-packets** *number*

<b>Description</b>	The total number of input packets that were received on this subinterface that were extracted to the control plane  The count includes packets eventually discarded by the CPM. Such discards include:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics in-terminated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the subinterface counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-discarded-packets** *number*

<b>Description</b>	The total number of packets, originating and transit, that should have been sent out this subinterface but were dropped  This includes IP packets dropped by egress interface ACL drop action.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics out-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-error-packets** *number*

<b>Description</b>	The number of packets, originating and transit, for which this router was successful in finding a path to their final destination through this subinterface but an error prevented their transmission  On 7250 IXR systems this is incremented when the IPv4 packet size exceeds the IP MTU and fragmentation was not allowed or not supported. It is also incremented when the MPLS packet size exceeds the MPLS MTU of the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-forwarded-octets** *number*

<b>Description</b>	The number of octets in transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics out-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-forwarded-packets** *number*

<b>Description</b>	The number of transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics out-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-octets** *number*

**Description** The total number of octets in packets delivered to the lower layers for transmission

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 statistics out-octets](#) *number*

**Tree** [out-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-originated-octets** *number*

**Description** The number of octets in packets which originated on the CPM and which the router attempted to forward out this subinterface

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 statistics out-originated-octets](#) *number*

**Tree** [out-originated-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-originated-packets** *number*

**Description** The number of packets which originated on the CPM and which the router attempted to forward out this subinterface

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 statistics out-originated-packets](#) *number*

**Tree** [out-originated-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-packets** *number*

<b>Description</b>	The total number of packets that this router supplied to the lower layers for transmission  This equals the sum of: out-error-packets out-discarded-packets out-originated-packets out-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv6 statistics out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**I2-mtu** *number*

<b>Description</b>	Layer-2 MTU of the subinterface in bytes.  Includes the Ethernet header and VLAN tags, and excludes 4-bytes FCS.  L2 MTU specifies the maximum sized Ethernet frame that can be transmitted on the subinterface. If a frame exceeds this size it is discarded. If the I2-mtu of the subinterface exceeds the port-mtu of the associated interface, the subinterface will remain operationally down.  The default value for a subinterface is taken from /system/mtu/default-I2-mtu. The L2 MTU is only configurable for bridged subinterfaces.  The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum L2 MTU of 9412 bytes and minimum of 1500 bytes.  The 7730 SXR systems support a maximum L2 MTU of 9408 bytes.  All other systems support a maximum L2 MTU of 9500 and minimum of 1500 bytes.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">I2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">I2-mtu</a>
<b>Range</b>	1450 to 9500
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-change** *string*

<b>Description</b>	The date and time of the most recent change to the subinterface state
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-mirror-destination**

<b>Description</b>	Container for options related to local mirror destination
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">local-mirror-destination</a>
<b>Tree</b>	<a href="#">local-mirror-destination</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	The configurable state of the local mirror destination
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a> <a href="#">local-mirror-destination</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	The operational state of the local mirror destination
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">local-mirror-destination</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls

**Description** Container for MPLS configuration and state at the subinterface level

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [mpls](#)

**Tree** [mpls](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Container for subinterface statistics, including all IPv4, IPv6 and MPLS packets belonging to a routed subinterface, or including just one of these protocols on a routed subinterface, or for all frames on a bridged subinterface

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [mpls](#) [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-discarded-packets *number*

**Description** The total number of input packets that were dropped due to explicit programming

The discards can be due to any of the following reasons

In an MPLS context, this includes the total number of MPLS packets that were dropped because they were received with forwarded top label having an MPLS TTL value of 1

**Context** [interface name](#) *string* [subinterface](#) *index* *number* [mpls](#) [statistics](#) [in-discarded-packets](#) *number*

**Tree** [in-discarded-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-error-packets** *number*

**Description** The total number of input packets discarded due to errors, counting transit and terminating traffic

In an IP context, the sum of the following RFC 4293 counters: ipIfStatsInHdrErrors ipIfStatsInNoRoutes ipIfStatsInAddrErrors ipIfStatsInUnknownProtos ipIfStatsInTruncatedPkts

In an MPLS context, the total number of MPLS packets that were dropped because:

**Context** [interface name](#) *string* [subinterface index](#) *number* [mpls statistics in-error-packets](#) *number*

**Tree** [in-error-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-forwarded-octets** *number*

**Description** The number of octets in packets received on this subinterface counted in in-forwarded-packets

**Context** [interface name](#) *string* [subinterface index](#) *number* [mpls statistics in-forwarded-octets](#) *number*

**Tree** [in-forwarded-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-forwarded-packets** *number*

**Description** The number of packets received on this subinterface for which the router was not the final destination and for which the router attempted to find a route to forward them to that final destination.

Note that non-terminating IPv4 packets with options and non-terminating IPv6 packets with extension headers are included in this count as are packets that trigger ICMP/ICMPv6 redirect messages.



<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-matched-ra-packets** *number*

<b>Description</b>	The total number of IPv6 packets matched with applied RA-Guard policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-matched-ra-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-matched-ra-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-octets** *number*

<b>Description</b>	The total number of octets received in input packets, counting transit and terminating traffic
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-packets** *number*

<b>Description</b>	The total number of input packets received, counting transit and terminating traffic  This equals the sum of: in-error-packets in-discarded-packets in-terminated-packets in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-packets</a> <i>number</i>

<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-terminated-octets** *number*

<b>Description</b>	The total number of octets in packets that were received on this subinterface and counted in in-terminated-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-terminated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-terminated-packets** *number*

<b>Description</b>	The total number of input packets that were received on this subinterface that were extracted to the control plane  The count includes packets eventually discarded by the CPM. Such discards include:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics in-terminated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Timestamp of the last time the subinterface counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-discarded-packets** *number*

<b>Description</b>	The total number of packets, originating and transit, that should have been sent out this subinterface but were dropped  This includes IP packets dropped by egress interface ACL drop action.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-error-packets** *number*

<b>Description</b>	The number of packets, originating and transit, for which this router was successful in finding a path to their final destination through this subinterface but an error prevented their transmission  On 7250 IXR systems this is incremented when the IPv4 packet size exceeds the IP MTU and fragmentation was not allowed or not supported. It is also incremented when the MPLS packet size exceeds the MPLS MTU of the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-forwarded-octets** *number*

<b>Description</b>	The number of octets in transit packets which the router attempted to forward out this subinterface
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-forwarded-packets** *number*

<b>Description</b>	The number of transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-octets** *number*

<b>Description</b>	The total number of octets in packets delivered to the lower layers for transmission
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-originated-octets** *number*

<b>Description</b>	The number of octets in packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-originated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-originated-octets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-originated-packets *number*

<b>Description</b>	The number of packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-originated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-originated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-packets *number*

<b>Description</b>	The total number of packets that this router supplied to the lower layers for transmission  This equals the sum of: out-error-packets out-discarded-packets out-originated-packets out-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">mpls statistics out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mpls-mtu *number*

<b>Description</b>	MPLS MTU of the subinterface in bytes, including the transmitted label stack.  MPLS MTU specifies the maximum sized MPLS packet that can be transmitted on the subinterface. If an MPLS packet containing any payload exceeds this size then it is dropped. If the payload of the dropped packet is IPv4 or IPv6 then this may also result in the generation of an ICMP error message that is either tunneled or sent back to the source.
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The default MPLS MTU for a subinterface is taken from `/system/mtu/default-mpls-mtu`.

The MPLS MTU is not configurable for subinterfaces of loopback interfaces.

The 7730 SXR systems support a maximum MPLS MTU of 9404 bytes.

Each 7250 IXR IMM supports a maximum of 4 different MPLS MTU values.

<b>Context</b>	<code>interface name string subinterface index number mpls-mtu number</code>
<b>Tree</b>	<code>mpls-mtu</code>
<b>Range</b>	1284 to 9496
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	The system assigned name of the subinterface. It is formed by taking the base interface name and appending a dot (.) and the subinterface index number. For example, ethernet-2/1.0
<b>Context</b>	<code>interface name string subinterface index number name string</code>
<b>Tree</b>	<code>name</code>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-down-reason** *keyword*

<b>Description</b>	The first (and possibly only) reason for the subinterface being operationally down
<b>Context</b>	<code>interface name string subinterface index number oper-down-reason keyword</code>
<b>Tree</b>	<code>oper-down-reason</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-disabled</li> <li>• port-down</li> <li>• ip-mtu-resource-exceeded</li> <li>• mpls-mtu-resource-exceeded</li> <li>• ip-mtu-too-large</li> <li>• mpls-mtu-too-large</li> <li>• l2-mtu-too-large</li> <li>• no-ip-config</li> </ul>

- ip-mtu-larger-than-oper-mac-vrf-mtu
- irb-mac-address-not-programmed
- missing-xdp-state
- no-underlay-egress-next-hop-resources
- cfm-ccm-defect
- no-irb-hardware-resources
- other

**Configurable**

False

**Platforms**

Supported on all platforms

**oper-state** *keyword***Description**

The operational state of the subinterface

**Context**[interface name](#) *string* [subinterface](#) *index* *number* [oper-state](#) *keyword***Tree**[oper-state](#)**Options**

- up
- down

**Configurable**

False

**Platforms**

Supported on all platforms

**ra-guard****Description**

Enable the ra-guard context

**Context**[interface name](#) *string* [subinterface](#) *index* *number* [ra-guard](#)**Tree**[ra-guard](#)**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**policy** *reference***Description**

Reference to RA Guard Policy to apply to the associated subinterface

**Context**[interface name](#) *string* [subinterface](#) *index* *number* [ra-guard](#) [policy](#) *reference***Tree**[policy](#)**Reference**[system](#) [ra-guard-policy](#) *name* *string***Configurable**

True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### vlan-list *vlan-id number*

**Description** List of VLAN IDs that the RA policy should be matched against

**Context** [interface name](#) *string* [subinterface index](#) *number* [ra-guard](#) [vlan-list](#) [vlan-id](#) *number*

**Tree** [vlan-list](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### vlan-id *number*

**Description** Enter the vlan-id context

**Context** [interface name](#) *string* [subinterface index](#) *number* [ra-guard](#) [vlan-list](#) [vlan-id](#) *number*

**Range** 0 to 4095

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### statistics

**Description** Container for subinterface statistics, including all IPv4, IPv6 and MPLS packets belonging to a routed subinterface, or including just one of these protocols on a routed subinterface, or for all frames on a bridged subinterface

**Context** [interface name](#) *string* [subinterface index](#) *number* [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** Supported on all platforms

### in-discarded-packets *number*

**Description** The total number of input packets that were dropped due to explicit programming

The discards can be due to any of the following reasons



In an MPLS context, this includes the total number of MPLS packets that were dropped because they were received with forwarded top label having an MPLS TTL value of 1

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-error-packets** *number*

<b>Description</b>	<p>The total number of input packets discarded due to errors, counting transit and terminating traffic</p> <p>In an IP context, the sum of the following RFC 4293 counters: ipIfStatsInHdrErrors ipIfStatsInNoRoutes ipIfStatsInAddrErrors ipIfStatsInUnknownProtos ipIfStatsInTruncatedPkts</p> <p>In an MPLS context, the total number of MPLS packets that were dropped because:</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-forwarded-octets** *number*

<b>Description</b>	The number of octets in packets received on this subinterface counted in in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-forwarded-packets** *number*

<b>Description</b>	The number of packets received on this subinterface for which the router was not the final destination and for which the router attempted to find a route to forward them to that final destination.  Note that non-terminating IPv4 packets with options and non-terminating IPv6 packets with extension headers are included in this count as are packets that trigger ICMP/ICMPv6 redirect messages.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-matched-ra-packets** *number*

<b>Description</b>	The total number of IPv6 packets matched with applied RA-Guard policy
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-matched-ra-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-matched-ra-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-octets** *number*

<b>Description</b>	The total number of octets received in input packets, counting transit and terminating traffic
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-packets** *number*

<b>Description</b>	The total number of input packets received, counting transit and terminating traffic  This equals the sum of: in-error-packets in-discarded-packets in-terminated-packets in-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-terminated-octets** *number*

<b>Description</b>	The total number of octets in packets that were received on this subinterface and counted in in-terminated-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-terminated-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-terminated-packets** *number*

<b>Description</b>	The total number of input packets that were received on this subinterface that were extracted to the control plane  The count includes packets eventually discarded by the CPM. Such discards include:
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics in-terminated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-terminated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear *string***

<b>Description</b>	Timestamp of the last time the subinterface counters were cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-discarded-packets *number***

<b>Description</b>	The total number of packets, originating and transit, that should have been sent out this subinterface but were dropped  This includes IP packets dropped by egress interface ACL drop action.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-error-packets *number***

<b>Description</b>	The number of packets, originating and transit, for which this router was successful in finding a path to their final destination through this subinterface but an error prevented their transmission  On 7250 IXR systems this is incremented when the IPv4 packet size exceeds the IP MTU and fragmentation was not allowed or not supported. It is also incremented when the MPLS packet size exceeds the MPLS MTU of the subinterface.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-forwarded-octets** *number*

<b>Description</b>	The number of octets in transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-forwarded-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-forwarded-packets** *number*

<b>Description</b>	The number of transit packets which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-forwarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-octets** *number*

<b>Description</b>	The total number of octets in packets delivered to the lower layers for transmission
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-originated-octets** *number*

<b>Description</b>	The number of octets in packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics out-originated-octets</a> <i>number</i>

<b>Tree</b>	<a href="#">out-originated-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-originated-packets** *number*

<b>Description</b>	The number of packets which originated on the CPM and which the router attempted to forward out this subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics</a> <a href="#">out-originated-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-originated-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-packets** *number*

<b>Description</b>	The total number of packets that this router supplied to the lower layers for transmission  This equals the sum of: out-error-packets out-discarded-packets out-originated-packets out-forwarded-packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">statistics</a> <a href="#">out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **type** *identityref*

<b>Description</b>	Indicates the context in which the ethernet subinterface will be used
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>routed Indicates subinterface is used in a routed context</li> <li>bridged</li> </ul>

- Indicates subinterface is used in a bridged context
- local-mirror-dest
- Indicates subinterface is used in a mirroring destination SPAN context

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### unidirectional-link-delay

<b>Description</b>	Unidirectional link delay configuration and state related to subinterface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">unidirectional-link-delay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-reported-dynamic-delay (*number* | *keyword*)

<b>Description</b>	Indicates the last delay measurement reported to the routing engine
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">unidirectional-link-delay</a> <a href="#">last-reported-dynamic-delay</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">last-reported-dynamic-delay</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	microseconds
<b>Options</b>	• none
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### static-delay (*number* | *keyword*)

<b>Description</b>	A statically configured unidirectional delay value that can be advertised as an interface attribute by an IGP
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">unidirectional-link-delay</a> <a href="#">static-delay</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">static-delay</a>
<b>Range</b>	1 to 16777215
<b>Default</b>	none

<b>Units</b>	microseconds
<b>Options</b>	• none
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## vlan

<b>Description</b>	Parameters for VLAN definition under SRL interfaces
<b>Context</b>	<a href="#">interface name</a> <a href="#">string</a> <a href="#">subinterface</a> <a href="#">index</a> <a href="#">number</a> <a href="#">vlan</a>
<b>Tree</b>	<a href="#">vlan</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## encap

<b>Description</b>	VLAN match parameters for the associated subinterface
<b>Context</b>	<a href="#">interface name</a> <a href="#">string</a> <a href="#">subinterface</a> <a href="#">index</a> <a href="#">number</a> <a href="#">vlan</a> <a href="#">encap</a>
<b>Tree</b>	<a href="#">encap</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## double-tagged

<b>Description</b>	When present, double-tagged frames with a specific, non-zero, outer and inner VLAN ID values are associated to the subinterface  By default, the specific configured vlan-id tags are stripped at ingress and pushed on egress.
<b>Context</b>	<a href="#">interface name</a> <a href="#">string</a> <a href="#">subinterface</a> <a href="#">index</a> <a href="#">number</a> <a href="#">vlan</a> <a href="#">encap</a> <a href="#">double-tagged</a>
<b>Tree</b>	<a href="#">double-tagged</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## inner-vlan-id (*number* | *keyword*)

<b>Description</b>	Inner VLAN tag identifier for double-tagged packets
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">vlan encap</a> <a href="#">double-tagged</a> <a href="#">inner-vlan-id</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">inner-vlan-id</a>
<b>Range</b>	1 to 4094
<b>Options</b>	<ul style="list-style-type: none"> <li>• any</li> <li>• optional</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **outer-vlan-id** (*number* | *keyword*)

<b>Description</b>	Outer VLAN tag identifier for double-tagged packets
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">vlan encap</a> <a href="#">double-tagged</a> <a href="#">outer-vlan-id</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">outer-vlan-id</a>
<b>Range</b>	1 to 4094
<b>Options</b>	<ul style="list-style-type: none"> <li>• any</li> <li>• optional</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **single-tagged**

<b>Description</b>	<p>When present, tagged frames with a specific, non-zero, outer VLAN ID are associated to the subinterface</p> <p>The outer VLAN-ID tag is considered service delimiting and it is by default stripped at ingress and restored/added on egress.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">vlan encap</a> <a href="#">single-tagged</a>
<b>Tree</b>	<a href="#">single-tagged</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **vlan-id** (*number* | *keyword*)

<b>Description</b>	VLAN identifier for single-tagged packets
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap single-tagged</a> <a href="#">vlan-id</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">vlan-id</a>
<b>Range</b>	1 to 4094
<b>Options</b>	<ul style="list-style-type: none"> <li>• optional</li> <li>• any</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### single-tagged-range

<b>Description</b>	<p>When present, tagged frames with a specific, non-zero, outer VLAN ID contained in a specified set of range are associated to the subinterface</p> <p>The outer VLAN ID tag of the frame is not stripped off on ingress, and no tag is pushed on egress.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap single-tagged-range</a>
<b>Tree</b>	<a href="#">single-tagged-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### low-vlan-id [range-low-vlan-id](#) *number*

<b>Description</b>	Enter the low-vlan-id list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap single-tagged-range low-vlan-id range-low-vlan-id</a> <i>number</i>
<b>Tree</b>	<a href="#">low-vlan-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
<b>Max. Elements</b>	8
<b>Min. Elements</b>	1

**range-low-vlan-id** *number*

<b>Description</b>	The low-value VLAN identifier in a range for single-tagged packets The range is matched inclusively.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap single-tagged-range low-vlan-id range-low-vlan-id</a> <i>number</i>
<b>Range</b>	1 to 4094
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**high-vlan-id** *number*

<b>Description</b>	The high-value VLAN identifier in a range for single-tagged packets The range is matched inclusively.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap single-tagged-range low-vlan-id range-low-vlan-id</a> <i>number</i> <a href="#">high-vlan-id</a> <i>number</i>
<b>Tree</b>	<a href="#">high-vlan-id</a>
<b>Range</b>	1 to 4094
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**untagged**

<b>Description</b>	When present, untagged frames and VLAN ID 0 priority tagged frames are associated to the subinterface when it belongs to an interface with vlan-tagging enabled
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">vlan encap untagged</a>
<b>Tree</b>	<a href="#">untagged</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tpid identityref**

<b>Description</b>	<p>Optionally set the tag protocol identifier field (TPID) that is accepted on the VLAN</p> <p>If not set, TPID 0x8100 is the default expected TPID on the interface for tagged frames. The behavior when processing untagged frames is unaffected by this command.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">tpid identityref</a>
<b>Tree</b>	<a href="#">tpid</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">TPID_0X8100</a> Default TPID value for 802.1q single-tagged VLANs</li> <li>• <a href="#">TPID_0X88A8</a> TPID value for 802.1ad provider bridging, QinQ or stacked VLANs</li> <li>• <a href="#">TPID_0X9100</a> Alternate TPID value</li> <li>• <a href="#">TPID_0X9200</a> Alternate TPID value</li> <li>• <a href="#">TPID_ANY</a> A wildcard that matches any of the generally used TPID values for singly- or multiply-tagged VLANs Equivalent to matching any of <a href="#">TPID_0X8100</a>, <a href="#">TPID_0X88A8</a>, <a href="#">TPID_0X9100</a> and <a href="#">TPID_0x9200</a>. This value is only applicable where the TPID of a packet is being matched.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-rate**

<b>Description</b>	Container for traffic rate statistics
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">traffic-rate</a>
<b>Tree</b>	<a href="#">traffic-rate</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-bps** *number*

<b>Description</b>	The ingress bandwidth utilization of the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">traffic-rate</a> <a href="#">in-bps</a> <i>number</i>
<b>Tree</b>	<a href="#">in-bps</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-bps** *number*

<b>Description</b>	The egress bandwidth utilization of the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">traffic-rate</a> <a href="#">out-bps</a> <i>number</i>
<b>Tree</b>	<a href="#">out-bps</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**transceiver**

<b>Description</b>	Enter the transceiver context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a>
<b>Tree</b>	<a href="#">transceiver</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**channel** [index](#) *number*

<b>Description</b>	List of physical channels supported by the transceiver associated with this port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">channel</a> <a href="#">index</a> <i>number</i>
<b>Tree</b>	<a href="#">channel</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**index** *number*

<b>Description</b>	Index of the physical channel or lane
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i>
<b>Range</b>	1 to 10
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### input-power

<b>Description</b>	Enter the input-power context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power</a>
<b>Tree</b>	<a href="#">input-power</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-condition *boolean*

<b>Description</b>	High alarm threshold condition. Set to true whenever the Rx power is above the high-alarm-threshold and set to false whenever the Rx power is below the high-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power</a> <a href="#">high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-threshold *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power</a> <a href="#">high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-condition *boolean*

<b>Description</b>	High warning threshold condition.
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Set to true whenever the Rx power is above the high-warning-threshold and set to false whenever the Rx power is below the high-warning-threshold

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **high-warning-threshold** *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **latest-value** *decimal-number*

<b>Description</b>	The current value of the optical Rx power in dBm
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the Rx power is below the low-alarm-threshold and set to false whenever the Rx power is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-threshold** *decimal-number*

<b>Description</b>	Low alarm threshold condition. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power low-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the Rx power is below the low-warning-threshold and set to false whenever the Rx power is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-threshold** *decimal-number*

<b>Description</b>	Low warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">input-power low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**laser-bias-current**

<b>Description</b>	Enter the laser-bias-current context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current</a>
<b>Tree</b>	<a href="#">laser-bias-current</a>



<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-condition *boolean*

<b>Description</b>	High alarm threshold condition. Set to true whenever the laser bias current is above the high-alarm-threshold and set to false whenever the laser bias current is below the high-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-threshold *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-condition *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the laser bias current is above the high-warning-threshold and set to false whenever the laser bias current is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-warning-threshold** *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**latest-value** *decimal-number*

<b>Description</b>	The current value of the laser bias current in mA
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the laser bias current is below the low-alarm-threshold and set to false whenever the laser bias current is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-threshold** *decimal-number*

<b>Description</b>	Low alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current low-alarm-threshold</a> <i>decimal-number</i>

<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### low-warning-condition *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the laser bias current is below the low-warning-threshold and set to false whenever the laser bias current is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current</a> <a href="#">low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### low-warning-threshold *decimal-number*

<b>Description</b>	Low warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">laser-bias-current</a> <a href="#">low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### output-power

<b>Description</b>	Enter the output-power context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power</a>
<b>Tree</b>	<a href="#">output-power</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-condition *boolean*

<b>Description</b>	High alarm threshold condition.
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Set to true whenever the Tx power is above the high-alarm-threshold and set to false whenever the Tx power is below the high-alarm-threshold

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-threshold *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-condition *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the Tx power is above the high-warning-threshold and set to false whenever the Tx power is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-threshold *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### latest-value *decimal-number*

**Description** The current value of the optical Tx power in dBm

**Context** [interface name](#) *string* [transceiver channel index](#) *number* [output-power latest-value](#) *decimal-number*

**Tree** [latest-value](#)

**Configurable** False

**Platforms** Supported on all platforms

### low-alarm-condition *boolean*

**Description** Low alarm threshold condition.  
Set to true whenever the Tx power is below the low-alarm-threshold and set to false whenever the Tx power is above the low-alarm-threshold

**Context** [interface name](#) *string* [transceiver channel index](#) *number* [output-power low-alarm-condition](#) *boolean*

**Tree** [low-alarm-condition](#)

**Configurable** False

**Platforms** Supported on all platforms

### low-alarm-threshold *decimal-number*

**Description** Low alarm threshold.  
Read from the installed transceiver

**Context** [interface name](#) *string* [transceiver channel index](#) *number* [output-power low-alarm-threshold](#) *decimal-number*

**Tree** [low-alarm-threshold](#)

**Configurable** False

**Platforms** Supported on all platforms

### low-warning-condition *boolean*

**Description** Low warning threshold condition.  
Set to true whenever the Tx power is below the low-warning-threshold and set to false whenever the Tx power is above the low-warning-threshold

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-threshold** *decimal-number*

<b>Description</b>	Low warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">output-power low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **wavelength** *decimal-number*

<b>Description</b>	Wavelength of the transmitting laser in nanometers
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver channel index</a> <i>number</i> <a href="#">wavelength</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">wavelength</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **connector-type** *keyword*

<b>Description</b>	Specifies the fiber connector type of the transceiver associated with the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver connector-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">connector-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• SC</li> <li>• FC-STYLE1-COPPER</li> <li>• FC-STYLE2-COPPER</li> <li>• BNC-OR-TNC</li> <li>• FC-COAX</li> <li>• FIBER-JACK</li> <li>• LC</li> </ul>

- MT-RJ
- MU
- SG
- OPTICAL-PIGTAIL
- MPO-1x12
- MPO-2x16
- HSSDC
- COPPER-PIGTAIL
- RJ45
- no-separable-connector
- MXC-2x16
- CS-OPTICAL-CONNECTOR
- SN-OPTICAL-CONNECTOR
- MPO-2x12
- MPO-1x16
- unknown

**Configurable**

False

**Platforms**

Supported on all platforms

**date-code** *string***Description**

Transceiver date code.

**Context**[interface name](#) *string* [transceiver date-code](#) *string***Tree**[date-code](#)**String Length**

20 to 32

**Configurable**

False

**Platforms**

Supported on all platforms

**ddm-events** *boolean***Description**

Controls the reporting of DDM events

When set to true, log events related to the Digital Diagnostic Monitoring (DDM) capabilities of the transceiver are generated.

When set to false, no DDM-related log events are generated for this port/transceiver.

When read from state this leaf always returns false (even if the configured value is true) when the Ethernet port is a copper/RJ45 port.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">ddm-events</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ddm-events</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **ethernet-pmd** *string*

<b>Description</b>	Specifies the Ethernet compliance code of the transceiver associated with the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">ethernet-pmd</a> <i>string</i>
<b>Tree</b>	<a href="#">ethernet-pmd</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **fault-condition** *boolean*

<b>Description</b>	Indicates if a fault condition exists in the transceiver.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">fault-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fault-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **form-factor** *keyword*

<b>Description</b>	Specifies the transceiver form factor associated with the port
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">form-factor</a> <i>keyword</i>
<b>Tree</b>	<a href="#">form-factor</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• CFP2</li> <li>• CFP2-ACO</li> <li>• CFP4</li> <li>• QSFP</li> <li>• QSFPplus</li> <li>• QSFP28</li> <li>• QSFPDD</li> <li>• SFP</li> <li>• SFPplus</li> </ul>



- Non-pluggable
- Other
- SFP28
- SFPDD
- QSFP56
- SFP56

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### forward-error-correction *keyword*

<b>Description</b>	<p>The forward error correction algorithm to use on the optical channel</p> <p>The same FEC algorithm must be used at both ends of a link.</p> <p>25G interfaces support disabled, base-r, rs-108 and rs-528; configuring other (incompatible) options will bring the port down. The FEC requirement for a 25G interface depends on the cable type. A CA-N DAC cable has a loss specification that requires no FEC. A CA-S DAC cable requires base-r FEC at a minimum. A CA-L DAC cable requires the stronger rs-108 Reed Solomon FEC.</p> <p>100G interfaces support disabled and rs-528; configuring other (incompatible) options will bring the port down.</p> <p>400G interfaces require rs-544; configuring other (unsupported) options will bring the port down.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">forward-error-correction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forward-error-correction</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• disabled</li> <li>• rs-528</li> <li>• rs-544</li> <li>• base-r <ul style="list-style-type: none"> <li>BASE-R FEC algorithm for 25GbE interfaces (also known as fire-code)</li> </ul> </li> <li>• rs-108 <ul style="list-style-type: none"> <li>Reed Solomon FEC algorithm for 25GbE interfaces</li> </ul> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215

### healthz

<b>Description</b>	The health of the component
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The parameters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-unhealthy** *string*

<b>Description</b>	Last unhealthy time  The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver healthz</a> <a href="#">last-unhealthy</a> <i>string</i>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **status** *keyword*

<b>Description</b>	Health status  The status of the component, indicating its current health.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver healthz</a> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified Unspecified status The component's health status has not yet been checked by the system.</li> <li>healthy</li> </ul>

**Healthy status**

The component is in a healthy state, and is operating within the expected parameters.

- unhealthy

**Unhealthy status**

The component is in a unhealthy state, it is not performing the function expected of it.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unhealthy-count** *number***Description**

Unhealthy count

The number of times the component has transitioned from the healthy state to any other state.

**Context**

[interface name](#) *string* [transceiver healthz unhealthy-count](#) *number*

**Tree**

[unhealthy-count](#)

**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-power****Description**

Enter the input-power context

**Context**

[interface name](#) *string* [transceiver input-power](#)

**Tree**

[input-power](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**high-alarm-condition** *boolean***Description**

High alarm threshold condition.

Set to true whenever the Rx power is above the high-alarm-threshold and set to false whenever the Rx power is below the high-alarm-threshold

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-alarm-threshold *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-condition *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the Rx power is above the high-warning-threshold and set to false whenever the Rx power is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-threshold *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**latest-value** *decimal-number*

<b>Description</b>	The current value of the optical Rx power in dBm
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the Rx power is below the low-alarm-threshold and set to false whenever the Rx power is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-threshold** *decimal-number*

<b>Description</b>	Low alarm threshold condition. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power low-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the Rx power is below the low-warning-threshold and set to false whenever the Rx power is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver input-power low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **low-warning-threshold** *decimal-number*

**Description** Low warning threshold.  
Read from the installed transceiver

**Context** [interface name](#) *string* [transceiver input-power](#) [low-warning-threshold](#) *decimal-number*

**Tree** [low-warning-threshold](#)

**Configurable** False

**Platforms** Supported on all platforms

### **laser-bias-current**

**Description** Enter the laser-bias-current context

**Context** [interface name](#) *string* [transceiver laser-bias-current](#)

**Tree** [laser-bias-current](#)

**Configurable** False

**Platforms** Supported on all platforms

### **high-alarm-condition** *boolean*

**Description** High alarm threshold condition.  
Set to true whenever the laser bias current is above the high-alarm-threshold and set to false whenever the laser bias current is below the high-alarm-threshold

**Context** [interface name](#) *string* [transceiver laser-bias-current](#) [high-alarm-condition](#) *boolean*

**Tree** [high-alarm-condition](#)

**Configurable** False

**Platforms** Supported on all platforms

### **high-alarm-threshold** *decimal-number*

**Description** High alarm threshold.  
Read from the installed transceiver

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **high-warning-condition** *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the laser bias current is above the high-warning-threshold and set to false whenever the laser bias current is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **high-warning-threshold** *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **latest-value** *decimal-number*

<b>Description</b>	The current value of the laser bias current in mA
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the laser bias current is below the low-alarm-threshold and set to false whenever the laser bias current is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-alarm-threshold** *decimal-number*

<b>Description</b>	Low alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">low-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the laser bias current is below the low-warning-threshold and set to false whenever the laser bias current is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-threshold** *decimal-number*

<b>Description</b>	Low warning threshold.
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	Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">laser-bias-current</a> <a href="#">low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-down-reason** *keyword*

<b>Description</b>	The reason for the transceiver being operationally down
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-present</li> <li>• read-failure</li> <li>• checksum-failure</li> <li>• unknown-transceiver</li> <li>• tx-laser-disabled</li> <li>• unsupported-breakout</li> <li>• port-disabled</li> <li>• connector-transceiver-down</li> <li>• unsupported-operational-mode</li> <li>• no-tunable-config</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	<p>The operational state of the transceiver</p> <p>The oper-state is always down when the Ethernet port is a copper/RJ45 port.</p>
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up</li> <li>• down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**output-power**

<b>Description</b>	Enter the output-power context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">output-power</a>
<b>Tree</b>	<a href="#">output-power</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-condition** *boolean*

<b>Description</b>	High alarm threshold condition. Set to true whenever the Tx power is above the high-alarm-threshold and set to false whenever the Tx power is below the high-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">output-power</a> <a href="#">high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-threshold** *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">output-power</a> <a href="#">high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-warning-condition** *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the Tx power is above the high-warning-threshold and set to false whenever the Tx power is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">output-power</a> <a href="#">high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### high-warning-threshold *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### latest-value *decimal-number*

<b>Description</b>	The current value of the optical Tx power in dBm
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### low-alarm-condition *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the Tx power is below the low-alarm-threshold and set to false whenever the Tx power is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### low-alarm-threshold *decimal-number*

<b>Description</b>	Low alarm threshold. Read from the installed transceiver
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power low-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the Tx power is below the low-warning-threshold and set to false whenever the Tx power is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-threshold** *decimal-number*

<b>Description</b>	Low warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver output-power low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **serial-number** *string*

<b>Description</b>	Transceiver serial number This is the information as read from the EEPROM of the part.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver serial-number</a> <i>string</i>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**temperature**

<b>Description</b>	Enter the temperature context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">temperature</a>
<b>Tree</b>	<a href="#">temperature</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-condition** *boolean*

<b>Description</b>	High alarm threshold condition Set to true whenever the temperature is above the high-alarm-threshold and set to false whenever the temperature is below the high-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">temperature</a> <a href="#">high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-threshold** *number*

<b>Description</b>	High alarm threshold Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">temperature</a> <a href="#">high-alarm-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-warning-condition** *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the temperature is above the high-warning-threshold and set to false whenever the temperature is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">temperature</a> <a href="#">high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **high-warning-threshold** *number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature high-warning-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **latest-value** *number*

<b>Description</b>	The current temperature of the transceiver module in degrees Celsius
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature latest-value</a> <i>number</i>
<b>Tree</b>	<a href="#">latest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the temperature is below the low-alarm-threshold and set to false whenever the temperature is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-alarm-threshold** *number*

<b>Description</b>	Low alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature low-alarm-threshold</a> <i>number</i>

<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the temperature is below the low-warning-threshold and set to false whenever the temperature is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature</a> <a href="#">low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-threshold** *number*

<b>Description</b>	Low warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature</a> <a href="#">low-warning-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **maximum** *number*

<b>Description</b>	Represents the highest temperature the transceiver has reached since it booted
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature</a> <a href="#">maximum</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **maximum-time** *string*

<b>Description</b>	Indicates the time this transceiver reached the temperature referenced in maximum
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver temperature maximum-time</a> <i>string</i>
<b>Tree</b>	<a href="#">maximum-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tx-laser** *boolean*

<b>Description</b>	Enable (true) or disable (false) the transmit laser of the transceiver When read from state this leaf always returns false (even if the configured value is true) when the Ethernet port is a copper/RJ45 port. Default is true (for interfaces that support transceivers).
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver tx-laser</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tx-laser</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**vendor** *string*

<b>Description</b>	Name of the transceiver vendor This is the information as read from the EEPROM of the part.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver vendor</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vendor-lot-number** *string*

<b>Description</b>	Vendor's lot number for the transceiver This is the information as read from the EEPROM of the part.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver vendor-lot-number</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-lot-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**vendor-part-number** *string*

<b>Description</b>	Vendor's part number for the transceiver This is the information as read from the EEPROM of the part.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">vendor-part-number</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vendor-revision** *string*

<b>Description</b>	Vendor's revision number for the transceiver This is the information as read from the EEPROM of the part.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">vendor-revision</a> <i>string</i>
<b>Tree</b>	<a href="#">vendor-revision</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**voltage**

<b>Description</b>	Enter the voltage context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">voltage</a>
<b>Tree</b>	<a href="#">voltage</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-condition** *boolean*

<b>Description</b>	High alarm threshold condition. Set to true whenever the module voltage is above the high-alarm-threshold and set to false whenever the module voltage is below the high-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver</a> <a href="#">voltage</a> <a href="#">high-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-alarm-threshold** *decimal-number*

<b>Description</b>	High alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">high-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-warning-condition** *boolean*

<b>Description</b>	High warning threshold condition. Set to true whenever the module voltage is above the high-warning-threshold and set to false whenever the module voltage is below the high-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">high-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">high-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**high-warning-threshold** *decimal-number*

<b>Description</b>	High warning threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">high-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">high-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**latest-value** *decimal-number*

<b>Description</b>	The current voltage reading of the transceiver module (in Volts)
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">latest-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latest-value</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-alarm-condition** *boolean*

<b>Description</b>	Low alarm threshold condition. Set to true whenever the module voltage is below the low-alarm-threshold and set to false whenever the module voltage is above the low-alarm-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">low-alarm-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-alarm-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-alarm-threshold** *decimal-number*

<b>Description</b>	Low alarm threshold. Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">low-alarm-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-alarm-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **low-warning-condition** *boolean*

<b>Description</b>	Low warning threshold condition. Set to true whenever the module voltage is below the low-warning-threshold and set to false whenever the module voltage is above the low-warning-threshold
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">low-warning-condition</a> <i>boolean</i>
<b>Tree</b>	<a href="#">low-warning-condition</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**low-warning-threshold** *decimal-number*

<b>Description</b>	Low warning threshold . Read from the installed transceiver
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver voltage</a> <a href="#">low-warning-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">low-warning-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**wavelength** *decimal-number*

<b>Description</b>	Wavelength of the transmitting laser in nanometers
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">transceiver wavelength</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">wavelength</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vlan-tagging** *boolean*

<b>Description</b>	When set to true the interface is allowed to accept frames with one or more VLAN tags
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">vlan-tagging</a> <i>boolean</i>
<b>Tree</b>	<a href="#">vlan-tagging</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## 6 network-instance

```

network-instance name string
+ admin-state keyword
- afts
  - ipv4-unicast
    - ipv4-entry prefix string
      - entry-metadata binary
      - next-hop-group reference
      - next-hop-group-network-instance reference
      - origin-network-instance reference
      - origin-protocol identityref
    - state-synced boolean
  - ipv6-unicast
    - ipv6-entry prefix string
      - entry-metadata binary
      - next-hop-group reference
      - next-hop-group-network-instance reference
      - origin-network-instance reference
      - origin-protocol identityref
    - state-synced boolean
  - next-hop-group id number
    - backup-next-hop-group reference
    - next-hop index reference
      - weight number
    - programmed-id number
+ aggregate-routes
  + route prefix (ipv4-prefix | ipv6-prefix)
  + admin-state keyword
  + aggregator
    + address string
    + as-number number
  + communities
    + add (bgp-std-community-type | identityref | bgp-large-community-type)
  + generate-icmp boolean
  - installed boolean
  + summary-only boolean
+ bfd
  + seamless-bfd
  + peer address (ipv4-address | ipv6-address)
    + discriminator number
  + reflector name string
    + admin-state keyword
    + description string
    + local-discriminator number
- bgp-rib
  - afi-safi afi-safi-name identityref
  - ipv4-labeled-unicast
    - local-rib
      - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) origin-protocol identityref path-id number
      - attr-id reference
      - backup-route boolean
      - best-route boolean
      - group-best boolean
      - invalid-reason
        - as-loop boolean
        - cluster-loop boolean

```

```

- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- received-mpls-label (number | keyword)
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-out
  - rib-in-post
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
      ipv6-address-with-zone) path-id number
    - attr-id reference
    - backup-route boolean
    - best-route boolean
    - group-best boolean
    - internal-tags string
    - invalid-reason
      - as-loop boolean
      - cluster-loop boolean
      - fib-programming-failed boolean
      - label-allocation-failed boolean
      - next-hop-unresolved boolean
      - rejected-route boolean
    - last-modified string
    - neighbor-as number
    - pending-delete boolean
    - received-mpls-label (number | keyword)
    - stale-route boolean
    - tie-break-reason keyword
    - used-route boolean
    - valid-route boolean
  - rib-in-pre
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
      ipv6-address-with-zone) path-id number
    - attr-id reference
    - received-mpls-label (number | keyword)
  - rib-out-post
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
      ipv6-address-with-zone) path-id number
    - advertised-mpls-label (number | keyword)
    - attr-id reference
- ipv4-unicast
  - local-rib
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
      ipv6-address-with-zone) origin-protocol identityref path-id number
    - attr-id reference
    - backup-route boolean
    - best-route boolean
    - group-best boolean
    - invalid-reason
      - as-loop boolean
      - cluster-loop boolean
      - fib-programming-failed boolean
      - label-allocation-failed boolean
      - next-hop-unresolved boolean
      - rejected-route boolean
    - last-modified string
    - neighbor-as number
    - pending-delete boolean

```

```

- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-out
- rib-in-post
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- backup-route boolean
- best-route boolean
- group-best boolean
- internal-tags string
- invalid-reason
- as-loop boolean
- cluster-loop boolean
- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- rib-out-post
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- ipv6-labeled-unicast
- local-rib
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) origin-protocol identityref path-id number
- attr-id reference
- backup-route boolean
- best-route boolean
- group-best boolean
- invalid-reason
- as-loop boolean
- cluster-loop boolean
- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- received-mpls-label (number | keyword)
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-out
- rib-in-post
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- backup-route boolean

```

```

- best-route boolean
- group-best boolean
- internal-tags string
- invalid-reason
  - as-loop boolean
  - cluster-loop boolean
  - fib-programming-failed boolean
  - label-allocation-failed boolean
  - next-hop-unresolved boolean
  - rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- received-mpls-label (number | keyword)
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
  - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
  - attr-id reference
  - received-mpls-label (number | keyword)
- rib-out-post
  - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
  - advertised-mpls-label (number | keyword)
  - attr-id reference
- ipv6-unicast
  - local-rib
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-protocol identityref path-id number
    - attr-id reference
    - backup-route boolean
    - best-route boolean
    - group-best boolean
    - invalid-reason
      - as-loop boolean
      - cluster-loop boolean
      - fib-programming-failed boolean
      - label-allocation-failed boolean
      - next-hop-unresolved boolean
      - rejected-route boolean
    - last-modified string
    - neighbor-as number
    - pending-delete boolean
    - stale-route boolean
    - tie-break-reason keyword
    - used-route boolean
    - valid-route boolean
  - rib-in-out
  - rib-in-post
    - route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
    - attr-id reference
    - backup-route boolean
    - best-route boolean
    - group-best boolean
    - internal-tags string
    - invalid-reason
      - as-loop boolean
      - cluster-loop boolean
      - fib-programming-failed boolean
      - label-allocation-failed boolean

```



```

- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- rib-out-post
- route prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone |
ipv6-address-with-zone) path-id number
- attr-id reference
- l3vpn-ipv4-unicast
- local-rib
- route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-
type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-
prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- backup-route boolean
- best-route boolean
- group-best boolean
- imported-ip-vrf-network-instances reference
- invalid-reason
- as-loop boolean
- cluster-loop boolean
- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- received-mpls-label (number | keyword)
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-out
- rib-in-post
- route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-
type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-
prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- backup-route boolean
- best-route boolean
- group-best boolean
- imported-ip-vrf-network-instances reference
- internal-tags string
- invalid-reason
- as-loop boolean
- cluster-loop boolean
- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- received-mpls-label (number | keyword)

```

```

- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
  - route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
    - attr-id reference
    - imported-ip-vrf-network-instances reference
    - received-mpls-label (number | keyword)
  - rib-out-post
    - route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
      - advertised-mpls-label (number | keyword)
      - attr-id reference
- l3vpn-ipv6-unicast
  - local-rib
    - route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
      - attr-id reference
      - backup-route boolean
      - best-route boolean
      - group-best boolean
      - imported-ip-vrf-network-instances reference
      - invalid-reason
        - as-loop boolean
        - cluster-loop boolean
        - fib-programming-failed boolean
        - label-allocation-failed boolean
        - next-hop-unresolved boolean
        - rejected-route boolean
      - last-modified string
      - neighbor-as number
      - pending-delete boolean
      - received-mpls-label (number | keyword)
      - stale-route boolean
      - tie-break-reason keyword
      - used-route boolean
      - valid-route boolean
  - rib-in-out
    - rib-in-post
      - route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
        - attr-id reference
        - backup-route boolean
        - best-route boolean
        - group-best boolean
        - imported-ip-vrf-network-instances reference
        - internal-tags string
        - invalid-reason
          - as-loop boolean
          - cluster-loop boolean
          - fib-programming-failed boolean
          - label-allocation-failed boolean
          - next-hop-unresolved boolean
          - rejected-route boolean
        - last-modified string
        - neighbor-as number
        - pending-delete boolean
        - received-mpls-label (number | keyword)

```

```

- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
- route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- imported-ip-vrf-network-instances reference
- received-mpls-label (number | keyword)
- rib-out-post
- route route-distinguisher (route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- advertised-mpls-label (number | keyword)
- attr-id reference
- route-target
- rib-in-out
- rib-in-post
- route origin-as number route-target-prefix string neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- backup-route boolean
- best-route boolean
- group-best boolean
- internal-tags string
- invalid-reason
- as-loop boolean
- cluster-loop boolean
- fib-programming-failed boolean
- label-allocation-failed boolean
- next-hop-unresolved boolean
- rejected-route boolean
- last-modified string
- neighbor-as number
- pending-delete boolean
- stale-route boolean
- tie-break-reason keyword
- used-route boolean
- valid-route boolean
- rib-in-pre
- route origin-as number route-target-prefix string neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- rib-out-post
- route origin-as number route-target-prefix string neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number
- attr-id reference
- attr-sets
- attr-set index number
- aggregator
- address (ipv4-address | ipv6-address)
- as-number number
- aigp number
- as-path
- segment as-path-index number
- member number
- type keyword
- atomic-aggregate boolean
- cluster-list (ipv4-address | ipv6-address)
- communities
- community string
- ext-community string

```

```

- large-community string
- local-pref number
- med number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
- origin keyword
- originator-id (ipv4-address | ipv6-address)
- pmsi-tunnel
  - flags
    - assisted-replication-type keyword
    - leaf-information-required boolean
    - pruned-flood-list
      - broadcast-multicast keyword
      - unknown-unicast keyword
    - label
      - value number
      - value-type keyword
    - tunnel-endpoint (ipv4-address | ipv6-address)
    - tunnel-type keyword
- prefix-sid
  - tlv type identityref
    - label-index
      - label-index number
    - srgb-originator
      - srgb string
- unknown-attributes
  - unknown-attribute unknown-attr-index number
  - attr-len number
  - attr-type number
  - extended boolean
  - optional boolean
  - partial boolean
  - transitive boolean
+ bridge-table
+ discard-unknown-dest-mac boolean
+ mac-duplication
+ action keyword
+ admin-state keyword
- duplicate-entries
  - mac address string
    - destination string
    - destination-index number
    - destination-type keyword
    - dup-detect-time string
    - hold-down-time-remaining (keyword | number)
+ hold-down-time (keyword | number)
+ monitoring-window number
+ num-moves number
+ mac-learning
+ admin-state keyword
+ aging
+ admin-state keyword
+ age-time number
- learnt-entries
  - mac address string
    - aging (number | keyword)
    - destination string
    - last-update string
  - mac-relearn-only boolean
  - oper-mac-learning keyword
  - oper-mac-learning-disabled-reason keyword
+ mac-limit
+ maximum-entries number
+ warning-threshold-pct number
- mac-table

```

```

- mac address string
  - destination string
  - destination-index number
  - destination-type keyword
  - failed-slots number
  - is-protected boolean
  - last-update string
  - not-programmed-reason keyword
  - type keyword
+ protect-anycast-gw-mac boolean
+ proxy-arp
+ admin-state keyword
- duplicate-entries
  - neighbor ipv4-address string
    - detect-time string
    - hold-down-time-remaining (keyword | number)
    - is-immutable boolean
    - link-layer-address string
    - state keyword
- dynamic-entries
  - neighbor ipv4-address string
    - aging (number | keyword)
    - is-immutable boolean
    - last-update string
    - link-layer-address string
    - state keyword
+ dynamic-learning
+ admin-state keyword
+ age-time (keyword | number)
+ send-refresh (number | keyword)
+ evpn
+ flood
  + gratuitous-arp boolean
  + unknown-arp-req boolean
+ internal-tags
  + set-tag-set reference
- evpn-entries
  - neighbor ipv4-address string
    - is-immutable boolean
    - last-update string
    - link-layer-address string
    - state keyword
+ ip-duplication
+ anti-spoof-mac string
+ hold-down-time (keyword | number)
+ monitoring-window number
+ num-moves number
+ static-blackhole boolean
- oper-down-reason keyword
+ process-arp-probes boolean
+ static-entries
  + neighbor ipv4-address string
    - is-immutable boolean
    - last-update string
    + link-layer-address string
    - state keyword
- statistics
  - active-entries number
  - in-active-entries number
  - neighbor-origin origin keyword
    - active-entries number
    - in-active-entries number
    - pending-entries number
    - total-entries number

```

```

- pending-entries number
- total-entries number
- table-entries
- neighbor ipv4-address string
  - is-immutable boolean
  - last-update string
  - link-layer-address string
  - origin keyword
  - state keyword
+ table-size number
+ trace-options
  + flag name keyword
  + modifier keyword
+ proxy-nd
+ admin-state keyword
- duplicate-entries
  - neighbor ipv6-address string
  - detect-time string
  - evpn-override boolean
  - hold-down-time-remaining (keyword | number)
  - is-immutable boolean
  - link-layer-address string
  - state keyword
  - type keyword
- dynamic-entries
  - neighbor ipv6-address string
  - aging (number | keyword)
  - evpn-override boolean
  - is-immutable boolean
  - last-update string
  - link-layer-address string
  - state keyword
  - type keyword
+ dynamic-learning
  + admin-state keyword
  + age-time (keyword | number)
  + send-refresh (number | keyword)
+ evpn
  + advertise-neighbor-type keyword
  + flood
  + unknown-neighbor-advertise-host boolean
  + unknown-neighbor-advertise-router boolean
  + unknown-neighbor-solicitation boolean
  + internal-tags
  + set-tag-set reference
- evpn-entries
  - neighbor ipv6-address string
  - evpn-override boolean
  - is-immutable boolean
  - last-update string
  - link-layer-address string
  - state keyword
  - type keyword
+ ip-duplication
  + anti-spoof-mac string
  + hold-down-time (keyword | number)
  + monitoring-window number
  + num-moves number
  + static-blackhole boolean
- oper-down-reason keyword
+ process-dad-neighbor-solicitations boolean
+ static-entries
  + neighbor ipv6-address string
  - evpn-override boolean

```

```

- is-immutable boolean
- last-update string
+ link-layer-address string
- state keyword
+ type keyword
- statistics
- active-entries number
- in-active-entries number
- neighbor-origin origin keyword
- active-entries number
- in-active-entries number
- pending-entries number
- total-entries number
- pending-entries number
- total-entries number
- table-entries
- neighbor ipv6-address string
- evpn-override boolean
- is-immutable boolean
- last-update string
- link-layer-address string
- origin keyword
- state keyword
- type keyword
+ table-size number
+ trace-options
+ flag name keyword
+ modifier keyword
- reserved-macs
- mac address string
- users application string
+ split-horizon-group name string
+ static-mac
+ mac address string
+ destination (keyword | subinterface-all | name)
- statistics
- active-entries number
- failed-entries number
- mac-type type keyword
- active-entries number
- failed-entries number
- total-entries number
- total-entries number
+ tldp-mac-flush
+ send-flush-on-failure boolean
+ connection-point name string
+ bridge-table
+ discard-unknown-src-mac boolean
+ mac-duplication
+ action keyword
- duplicate-entries
- mac address string
- dup-detect-time string
- hold-down-time-remaining (keyword | number)
+ mac-learning
+ admin-state keyword
+ aging
+ admin-state keyword
- learnt-entries
- mac address string
- aging (number | keyword)
- last-update string
+ mac-limit
+ maximum-entries number

```

```

+ warning-threshold-pct number
- mac-table
- mac address string
  - failed-slots number
  - last-update string
  - not-programmed-reason keyword
  - type keyword
- statistics
  - active-entries number
  - failed-entries number
  - mac-type type keyword
    - active-entries number
    - failed-entries number
    - total-entries number
  - total-entries number
- index number
- oper-down-reason keyword
- oper-state keyword
+ pseudowire name string
+ admin-state keyword
+ control-word boolean
- destination-index number
+ flow-label boolean
- flow-label-oper-state keyword
- index number
- last-change string
- local
  - operational-ingress-vc-label number
  - pseudowire-status keyword
- oper-down-reason keyword
- oper-state keyword
+ pw-tunnel reference
- remote
  - operational-egress-vc-label number
  - pseudowire-status keyword
+ signaling
+ static
  + egress-vc-label number
  + ingress-vc-label number
+ tldp
  + advertise-l2-mtu number
  + ignore-mtu-mismatch boolean
  + virtual-circuit-type keyword
+ virtual-circuit-identifier number
+ description string
- icmp
- statistics
  - last-clear string
  - total
    - in-error-packets number
    - in-packets number
    - out-error-packets number
    - out-packets number
  - type name keyword
    - in-packets number
    - out-error-packets number
    - out-packets number
- icmp6
- statistics
  - last-clear string
  - total
    - in-error-packets number
    - in-packets number
    - out-error-packets number

```



```

-   out-packets number
-   type name keyword
-   in-packets number
-   out-error-packets number
-   out-packets number
+ inter-instance-policies
+   apply-policy
+     export-policy reference
+     import-policy reference
+ interface name string
+   bridge-table
+     mac-relearn-only boolean
+     multicast-forwarding keyword
+     oper-mac-learning keyword
+     oper-mac-learning-disabled-reason keyword
+   connection-point reference
+   index number
+   interface-ref
+     interface reference
+     subinterface reference
+     oper-down-reason keyword
+     oper-state keyword
+ ip-forwarding
+   last-resort-lookup
+     network-instance reference
+   receive-ipv4-check boolean
+   receive-ipv6-check boolean
+ ip-load-balancing
+   resilient-hash-prefix ip-prefix (ipv4-prefix | ipv6-prefix)
+   hash-buckets-per-path number
+   max-paths number
+ ip-tunnel-decapsulation
+   group name string
+   allowed-payloads keyword
+   termination-subnet ip-prefix (ipv4-prefix | ipv6-prefix)
+ maintenance-policies
+   policy maintenance-policy-name string
+   revert-timer (number | keyword)
+   seamless-bfd
+     desired-minimum-transmit-interval number
+     detection-multiplier number
+     hold-down-timer (number | keyword)
+     mode keyword
+     return-path-label number
+     threshold number
+     wait-for-up-timer number
+ mpls
+   icmp-tunneling boolean
+   static-entry top-label number preference number
+     admin-state keyword
+     collect-stats boolean
+     installed boolean
+     next-hop-group reference
+     operation keyword
+     resolved-next-hop-group-id reference
+   static-label-block reference
+   static-label-block-status keyword
+ mpls-forwarding
+   forward-received-packets boolean
+ mtu
+   path-mtu-discovery boolean
- multicast-forwarding-information-base
-   multicast-route source (ipv4-address | ipv6-address) group (ipv4-address | ipv6-address)
-   last-update string

```

```

- outgoing-interface index number
  - forward boolean
- outgoing-next-hop-group index number
  - forward boolean
+ next-hop-groups
+ group name string
+ admin-state keyword
+ blackhole
+ generate-icmp boolean
+ nexthop index number
+ admin-state keyword
+ encapsulate-header keyword
+ failure-detection
+ enable-bfd
  + local-address (ipv4-address | ipv6-address)
  + local-discriminator number
  + remote-discriminator number
+ gre
+ destination-ip (ipv4-address-unicast | ipv6-address-unicast)
+ source-ip (ipv4-address-unicast | ipv6-address-unicast)
+ ip-address (ipv4-address-with-zone | ipv6-address-with-zone)
+ pushed-mps-label-stack (number | keyword)
+ resolve boolean
- oper-down-reason keyword
- oper-mac-vrf-mtu number
- oper-state keyword
- oper-vpws-mtu number
+ policy-forwarding
+ interface subinterface string
+ apply-forwarding-policy reference
+ interface-ref
+ interface reference
+ subinterface reference
+ policy policy-id string
+ description string
+ rule sequence-id number
+ action
+ decap-fallback-network-instance reference
+ decap-network-instance reference
+ encapsulate-gre
+ target id string
+ destination (ipv4-prefix | ipv6-prefix)
+ ip-ttl number
+ source (ipv4-address | ipv6-address)
+ network-instance reference
+ next-hop (ipv4-address | ipv6-address)
+ post-decap-network-instance reference
+ description string
+ match
+ ipv4
+ destination-ip
+ prefix string
+ dscp-set (number | keyword)
+ protocol (number | keyword)
+ source-ip
+ prefix string
+ ipv6
+ destination-ip
+ prefix string
+ dscp-set (number | keyword)
+ next-header (number | keyword)
+ source-ip
+ prefix string
+ transport

```

```

    + destination-port (string | number | keyword)
    + source-port (string | number | keyword)
  - tcam-entries
    - forwarding-complex complex-identifier string
    - tcam-entries number
  + type keyword
+ protocols
+ bgp
  + admin-state keyword
  + afi-safi afi-safi-name identityref
  - active-routes number
  + add-paths
    + receive boolean
    + send boolean
    + send-max number
    + send-multipath
  + admin-state keyword
  + best-path-selection
  + accumulated-igp boolean
  + evpn
    + advertise-ipv6-next-hops boolean
    + default-received-encapsulation keyword
    + inter-as-vpn boolean
    + keep-all-routes boolean
    + next-hop-resolution
      + ipv4-next-hops
        + route-resolution
          + admin-state keyword
          + ignore-default-routes boolean
        + tunnel-resolution
          + allowed-tunnel-types identityref
          + selection-attributes
            + tag
              + mandatory boolean
      + ipv6-next-hops
        + route-resolution
          + admin-state keyword
          + ignore-default-routes boolean
        + tunnel-resolution
          + allowed-tunnel-types identityref
          + selection-attributes
            + tag
              + mandatory boolean
    + next-hop-self-route-reflector boolean
  + rapid-update boolean
+ export-policy reference
+ import-policy reference
+ ipv4-labeled-unicast
  + advertise-ipv6-next-hops boolean
  + backup-paths
    + install boolean
  + convergence
    - converged-peers number
    - convergence-state keyword
    - convergence-time number
    - first-up-peer-time number
    - last-up-peer-time number
    + max-wait-to-advertise number
    - oper-max-wait-to-advertise number
    - up-peers number
    - up-peers-when-min-expired number
  + next-hop-resolution
    + ipv4-next-hops
      + route-resolution

```

```

    + admin-state keyword
    + ignore-default-routes boolean
  + tunnel-resolution
    + allowed-tunnel-types identityref
    + selection-attributes
      + tag
      + mandatory boolean
  + ipv6-next-hops
    + route-resolution
    + admin-state keyword
    + ignore-default-routes boolean
    + tunnel-resolution
    + allowed-tunnel-types identityref
    + selection-attributes
      + tag
      + mandatory boolean
  + rapid-update boolean
  + receive-ipv6-next-hops boolean
+ ipv4-unicast
  + advertise-ipv6-next-hops boolean
  + convergence
    - converged-peers number
    - convergence-state keyword
    - convergence-time number
    - first-up-peer-time number
    - last-up-peer-time number
    + max-wait-to-advertise number
    - oper-max-wait-to-advertise number
    - up-peers number
    - up-peers-when-min-expired number
  + next-hop-resolution
  + ipv4-next-hops
    + tunnel-resolution
    + allowed-tunnel-types identityref
    + mode keyword
    + selection-attributes
      + tag
      + mandatory boolean
    + ipv6-next-hops
      + tunnel-resolution
      + allowed-tunnel-types identityref
      + mode keyword
      + selection-attributes
        + tag
        + mandatory boolean
  + receive-ipv6-next-hops boolean
+ ipv6-labeled-unicast
  + backup-paths
  + install boolean
  + convergence
    - converged-peers number
    - convergence-state keyword
    - convergence-time number
    - first-up-peer-time number
    - last-up-peer-time number
    + max-wait-to-advertise number
    - oper-max-wait-to-advertise number
    - up-peers number
    - up-peers-when-min-expired number
  + next-hop-resolution
  + ipv4-next-hops
    + route-resolution
    + admin-state keyword
    + ignore-default-routes boolean

```

```

    + tunnel-resolution
    + allowed-tunnel-types identityref
    + selection-attributes
      + tag
        + mandatory boolean
  + ipv6-next-hops
  + route-resolution
  + admin-state keyword
  + ignore-default-routes boolean
  + tunnel-resolution
  + allowed-tunnel-types identityref
  + selection-attributes
    + tag
      + mandatory boolean
+ rapid-update boolean
+ ipv6-unicast
+ convergence
- converged-peers number
- convergence-state keyword
- convergence-time number
- first-up-peer-time number
- last-up-peer-time number
+ max-wait-to-advertise number
- oper-max-wait-to-advertise number
- up-peers number
- up-peers-when-min-expired number
+ next-hop-resolution
+ ipv4-next-hops
+ tunnel-resolution
+ allowed-tunnel-types identityref
+ mode keyword
+ selection-attributes
+ tag
+ mandatory boolean
+ ipv6-next-hops
+ tunnel-resolution
+ allowed-tunnel-types identityref
+ mode keyword
+ selection-attributes
+ tag
+ mandatory boolean
+ l3vpn-ipv4-unicast
+ advertise-ipv6-next-hops boolean
+ convergence
- converged-peers number
- convergence-state keyword
- convergence-time number
- first-up-peer-time number
- last-up-peer-time number
+ max-wait-to-advertise number
- oper-max-wait-to-advertise number
- up-peers number
- up-peers-when-min-expired number
+ inter-as-vpn boolean
+ keep-all-routes boolean
+ next-hop-self-route-reflector boolean
+ rapid-update boolean
+ receive-ipv6-next-hops boolean
+ l3vpn-ipv6-unicast
+ convergence
- converged-peers number
- convergence-state keyword
- convergence-time number
- first-up-peer-time number

```

```

- last-up-peer-time number
+ max-wait-to-advertise number
- oper-max-wait-to-advertise number
- up-peers number
- up-peers-when-min-expired number
+ inter-as-vpn boolean
+ keep-all-routes boolean
+ next-hop-self-route-reflector boolean
+ rapid-update boolean
+ multipath
+ allow-multiple-as boolean
+ maximum-paths number
- received-routes number
+ as-path-options
+ allow-own-as number
+ remove-private-as
+ ignore-peer-as boolean
+ leading-only boolean
+ mode keyword
+ authentication
+ keychain reference
+ password string
+ autonomous-system number
+ best-path-selection
+ advertise-inactive boolean
+ always-compare-med boolean
+ bgp-label
+ bgp-ipvpn
+ next-hop-resolution
+ ipv4-next-hops
+ route-resolution
+ admin-state keyword
+ ignore-default-routes boolean
+ tunnel-resolution
+ allowed-tunnel-types identityref
+ selection-attributes
+ tag
+ mandatory boolean
+ ipv6-next-hops
+ route-resolution
+ admin-state keyword
+ ignore-default-routes boolean
+ tunnel-resolution
+ allowed-tunnel-types identityref
+ selection-attributes
+ tag
+ mandatory boolean
+ bgp-vpn
+ dynamic-label-block reference
- dynamic-label-block-status keyword
+ convergence
+ min-wait-to-advertise number
+ dynamic-neighbors
+ accept
+ match prefix (ipv4-prefix | ipv6-prefix)
+ allowed-peer-as string
+ peer-group reference
+ max-sessions number
+ interface interface-name string
+ allowed-peer-as string
+ max-sessions number
+ peer-group reference
+ ebgp-default-policy
+ export-reject-all boolean

```

```

+ import-reject-all boolean
+ export-policy reference
+ failure-detection
+ enable-bfd boolean
+ fast-failover boolean
+ graceful-restart
+ admin-state keyword
+ requested-restart-time number
+ stale-routes-time number
+ group group-name string
+ admin-state keyword
+ afi-safi afi-safi-name identityref
+ add-paths
+ receive boolean
+ send boolean
+ send-max number
+ send-multipath
+ admin-state keyword
+ evpn
+ advertise-ipv6-next-hops boolean
+ default-received-encapsulation keyword
+ prefix-limit-accepted
+ max-received-routes number
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ warning-threshold-pct number
+ export-policy reference
+ import-policy reference
+ ipv4-labeled-unicast
+ advertise-ipv6-next-hops boolean
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ ipv4-unicast
+ advertise-ipv6-next-hops boolean
+ link-bandwidth
+ add-next-hop-count-to-received-bgp-routes (number | keyword)
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ ipv6-labeled-unicast
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ ipv6-unicast
+ link-bandwidth

```

```

+ add-next-hop-count-to-received-bgp-routes (number | keyword)
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ l3vpn-ipv4-unicast
+ advertise-ipv6-next-hops boolean
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ l3vpn-ipv6-unicast
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ route-target
+ prefix-limit-accepted
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
+ prevent-teardown boolean
+ warning-threshold-pct number
+ send-default-route boolean
+ as-path-options
+ allow-own-as number
+ remove-private-as
+ ignore-peer-as boolean
+ leading-only boolean
+ mode keyword
+ replace-peer-as boolean
+ authentication
+ keychain reference
+ password string
+ description string
+ export-policy reference
+ failure-detection
+ enable-bfd boolean
+ fast-failover boolean
+ graceful-restart
+ admin-state keyword
+ requested-restart-time number
+ stale-routes-time number
+ import-policy reference
+ local-as
+ as-number number
+ prepend-global-as boolean
+ prepend-local-as boolean
+ local-preference number

```



```

- maintenance-group string
+ multihop
  + admin-state keyword
  + maximum-hops number
+ next-hop-self boolean
+ optional-attributes
  + block-prefix-sid boolean
+ peer-as number
+ route-reflector
  + client boolean
  + cluster-id (number | dotted-quad)
+ send-default-route
  + export-policy reference
  + ipv4-unicast boolean
  + ipv6-unicast boolean
- statistics
  - disabled-peers number
  - dynamic-peers number
  - path-memory number
  - total-active-routes number
  - total-paths number
  - total-peers number
  - total-prefixes number
  - total-received-routes number
  - up-peers number
+ timers
  + connect-retry number
  + hold-time number
  + keepalive-interval number
  + minimum-advertisement-interval number
  + prefix-limit-restart-timer number
+ trace-options
  + flag name keyword
  + modifier keyword
+ transport
  + local-address (ipv4-address | ipv6-address | subinterface-all)
  + mtu-discovery boolean
  + passive-mode boolean
  + tcp-mss number
- under-maintenance boolean
+ import-policy reference
+ local-preference number
- maintenance-group string
+ max-ecmp-hash-buckets-per-next-hop-group number
+ neighbor peer-address (ipv4-address-with-zone | ipv6-address-with-zone)
  + admin-state keyword
  - advertised-capabilities keyword
  + afi-safi afi-safi-name identityref
  - active-routes number
  + add-paths
    + receive boolean
    + send boolean
    + send-max number
    + send-multipath
  + admin-state keyword
+ evpn
  + advertise-ipv6-next-hops boolean
  + default-received-encapsulation keyword
  + prefix-limit-accepted
    + max-received-routes number
    - prefix-limit-exceeded boolean
    + warning-threshold-pct number
  + prefix-limit-received
    + max-received-routes number

```

```

- prefix-limit-exceeded boolean
+ warning-threshold-pct number
+ export-policy reference
+ import-policy reference
+ ipv4-labeled-unicast
+ advertise-ipv6-next-hops boolean
+ prefix-limit-accepted
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ ipv4-unicast
+ advertise-ipv6-next-hops boolean
+ link-bandwidth
+ add-next-hop-count-to-received-bgp-routes (number | keyword)
+ prefix-limit-accepted
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ ipv6-labeled-unicast
+ prefix-limit-accepted
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ ipv6-unicast
+ link-bandwidth
+ add-next-hop-count-to-received-bgp-routes (number | keyword)
+ prefix-limit-accepted
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ l3vpn-ipv4-unicast
+ advertise-ipv6-next-hops boolean
+ prefix-limit-accepted
+ max-received-routes number
- prefix-limit-exceeded boolean
+ prevent-teardown boolean
+ warning-threshold-pct number
+ prefix-limit-received

```

```

    + max-received-routes number
    - prefix-limit-exceeded boolean
    + prevent-teardown boolean
    + warning-threshold-pct number
+ receive-ipv6-next-hops boolean
+ l3vpn-ipv6-unicast
+ prefix-limit-accepted
  + max-received-routes number
  - prefix-limit-exceeded boolean
  + prevent-teardown boolean
  + warning-threshold-pct number
+ prefix-limit-received
  + max-received-routes number
  - prefix-limit-exceeded boolean
  + prevent-teardown boolean
  + warning-threshold-pct number
- oper-state keyword
- received-routes number
- received-routes-withdrawn-due-to-error number
- rejected-routes number
+ route-target
  + prefix-limit-accepted
    + max-received-routes number
    - prefix-limit-exceeded boolean
    + prevent-teardown boolean
    + warning-threshold-pct number
  + prefix-limit-received
    + max-received-routes number
    - prefix-limit-exceeded boolean
    + prevent-teardown boolean
    + warning-threshold-pct number
  + send-default-route boolean
  - sent-routes number
+ as-path-options
  + allow-own-as number
  + remove-private-as
    + ignore-peer-as boolean
    + leading-only boolean
    + mode keyword
  + replace-peer-as boolean
+ authentication
  + keychain reference
  + password string
  - transmit-active boolean
+ description string
- discovered-by-lldp boolean
- dynamic-neighbor boolean
- established-transitions number
+ export-policy reference
+ failure-detection
  + enable-bfd boolean
  + fast-failover boolean
+ graceful-restart
  + admin-state keyword
  - helper-active boolean
  - last-restart-time string
  - neighbor-capability
    - afi-safi name identityref
    - forwarding-preserved boolean
    - restart-time number
  - number-of-restarts number
  + requested-restart-time number
  + stale-routes-time number
+ import-policy reference

```

```

- last-established string
- last-event keyword
- last-prefix-limit-exceeded string
- last-state keyword
+ local-as
+ as-number number
+ prepend-global-as boolean
+ prepend-local-as boolean
+ local-preference number
- maintenance-group string
+ multihop
+ admin-state keyword
+ maximum-hops number
+ next-hop-self boolean
+ optional-attributes
+ block-prefix-sid boolean
+ peer-as number
+ peer-group reference
- peer-router-id string
- peer-type keyword
- received-afi-safi identityref
- received-capabilities keyword
- received-end-of-rib identityref
- received-messages
- last-notification-error-code keyword
- last-notification-error-subcode keyword
- last-notification-time string
- last-update-time string
- malformed-updates number
- queue-depth number
- route-refresh number
- total-messages number
- total-non-updates number
- total-notifications number
- total-updates number
+ route-reflector
+ client boolean
+ cluster-id (number | dotted-quad)
+ send-default-route
+ export-policy reference
+ ipv4-unicast boolean
+ ipv6-unicast boolean
- sent-end-of-rib identityref
- sent-messages
- last-notification-error-code keyword
- last-notification-error-subcode keyword
- last-notification-time string
- queue-depth number
- route-refresh number
- total-messages number
- total-non-updates number
- total-notifications number
- total-updates number
- session-state keyword
- slow-peer keyword
+ timers
+ connect-retry number
+ hold-time number
+ keepalive-interval number
+ minimum-advertisement-interval number
- negotiated-hold-time number
- negotiated-keepalive-interval number
- next-connect-retry-time string
+ prefix-limit-restart-timer number

```

```

+ trace-options
+   + flag name keyword
+     + modifier keyword
+ transport
+   + local-address (ipv4-address | ipv6-address | subinterface-all)
+     - local-port number
+     + mtu-discovery boolean
+     + passive-mode boolean
+     - remote-port number
+     + tcp-mss number
+     - under-maintenance boolean
- oper-state keyword
+ preference
+   + ebgp number
+   + ibgp number
+ rib-management
+   + table address-family identityref
+     + route-table-import reference
+ route-advertisement
+   + rapid-withdrawal boolean
+   + wait-for-fib-install boolean
+ route-reflector
+   + client boolean
+   + cluster-id (number | dotted-quad)
+ router-id (ipv4-address | ipv6-address)
+ segment-routing-mpls
+   + admin-state keyword
- statistics
-   - disabled-peers number
-   - dynamic-peers number
-   - path-memory number
-   - total-active-routes number
-   - total-paths number
-   - total-peers number
-   - total-prefixes number
-   - total-received-routes number
-   - up-peers number
+ trace-options
+   + flag name keyword
+     + modifier keyword
+ transport
+   + mtu-discovery boolean
+   + single-hop-connected-check boolean
+   + tcp-mss number
+   - under-maintenance boolean
+ bgp-evpn
+   + bgp-instance id reference
+     + admin-state keyword
+     + ecmp number
+     + encapsulation-type keyword
+     + evi number
+     + internal-tags
+       + set-tag-set reference
+     + mpls
+       + bridge-table
+         - ingress-multicast-mpls-label number
+         - ingress-unicast-mpls-label number
+         - multicast-destinations
+           - destination tep (ipv4-address | ipv6-address) evi-label number tunnel-
id number
+           - destination-index number
+           - multicast-forwarding keyword
+           - not-programmed-reason keyword
+         - multicast-limit

```

```

    - current-usage number
    - maximum-entries number
+ split-horizon-group reference
- statistics
  - active-entries number
  - failed-entries number
  - mac-type type keyword
    - active-entries number
    - failed-entries number
    - total-entries number
  - total-entries number
- unicast-destinations
  - destination tep (ipv4-address | ipv6-address) evi-label number tunnel-
id number
    - destination-index number
    - mac-table
      - mac address string
      - failed-slots number
      - last-update string
      - not-programmed-reason keyword
      - type keyword
    - not-programmed-reason keyword
    - statistics
      - active-entries number
      - failed-entries number
      - mac-type type keyword
        - active-entries number
        - failed-entries number
        - total-entries number
      - total-entries number
    - es-destination esi string
    - destination tep (ipv4-address | ipv6-address) evi-label number tunnel-
id number
    - destination-index number
    - mac-table
      - mac address string
      - failed-slots number
      - last-update string
      - not-programmed-reason keyword
      - type keyword
    - statistics
      - active-entries number
      - failed-entries number
      - mac-type type keyword
        - active-entries number
        - failed-entries number
        - total-entries number
      - total-entries number
+ control-word boolean
+ flow-label boolean
+ next-hop-resolution
+ allowed-tunnel-types identityref
+ selection-attributes
  + tag
    + mandatory boolean
+ route-table
  - ingress-mpls-label number
- oper-down-reason keyword
- oper-state keyword
+ routes
+ bridge-table
  + inclusive-mcast
  + advertise boolean
  + originating-ip (ipv4-address | ipv6-address)

```

```

+ mac-ip
+   advertise boolean
+   advertise-arp-nd-extended-community boolean
+   advertise-arp-nd-only-with-mac-table-entry boolean
+ next-hop (keyword | ipv4-address | ipv6-address)
+ vlan-aware-bundle-eth-tag number
+ route-table
+   ip-prefix
+     evpn-link-bandwidth
+     advertise
+       maximum-dynamic-weight number
+       weight (number | keyword)
+     weighted-ecmp
+     admin-state keyword
+     max-ecmp-hash-buckets-per-next-hop-group number
+   mac-ip
+     advertise-gateway-mac boolean
+ vpw-attachment-circuits
+   local
+     local-attachment-circuit name string
+     connection-point reference
+     ethernet-tag number
+     ingress-mpls-label number
+   remote
+     remote-attachment-circuit name string
+     connection-point reference
+     destinations
+     mpls
+     - destination tep (ipv4-address | ipv6-address) evi-
Label number tunnel-id number
+     - destination-index number
+     - not-programmed-reason keyword
+     - es-destination esi string
+     - destination tep (ipv4-address | ipv6-address) evi-
Label number tunnel-id number
+     - destination-index number
+     - not-programmed-reason keyword
+     ethernet-tag number
+   vxlan-interface reference
+ bgp-ipvpn
+   bgp-instance id reference
+   admin-state keyword
+   ecmp number
+   encapsulation-type keyword
+   mpls
+     ingress-mpls-label number
+   next-hop-resolution
+     allowed-tunnel-types identityref
+     selection-attributes
+     tag
+     + mandatory boolean
+     oper-down-reason keyword
+     oper-state keyword
+ bgp-vpn
+   backup-paths
+     ipv4-unicast
+     + install boolean
+     ipv6-unicast
+     + install boolean
+   bgp-instance id number
+   export-policy reference
+   import-policy reference
+   oper-down-reason keyword
+   route-distinguisher

```

```

+ rd (route-distinguisher-type-0 | route-distinguisher-type-1 | route-
distinguisher-type-2 | route-distinguisher-type-2b)
- route-distinguisher-origin keyword
+ route-target
- export-route-target-origin keyword
+ export-rt (string | string | string | string | string | string | string |
string)
- import-route-target-origin keyword
+ import-rt (string | string | string | string | string | string | string |
string)
+ combined-ecmp
+ gribi
+ admin-state keyword
+ default-metric number
+ default-preference number
+ max-ecmp-hash-buckets-per-next-hop-group number
+ maximum-routes number
- oper-state keyword
+ igmp
+ admin-state keyword
- group-count number
+ interface interface-name string
+ admin-state keyword
- group-count number
+ import-policy reference
+ maximum-number-group-sources number
+ maximum-number-groups number
+ maximum-number-sources number
- membership-groups
- group group string
- expiry-time number
- filter-mode keyword
- group-type keyword
- igmp-compatibility-mode keyword
- last-reporter (ipv4-address | ipv6-address)
- source source string
- expiry-time number
- forwarding-state keyword
- source-type keyword
- up-time string
- up-time string
- v1-host-timer number
- v2-host-timer number
- oper-state keyword
- oper-version number
- querier
- address string
- expiry-time number
- up-time string
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ router-alert-check boolean
+ ssm
+ mappings
+ group-range start string end string
+ source source string
+ static-membership-groups
+ group-range start string end string
+ source source string
+ starg
- statistics
- error
- bad-encoding number

```



```

- bad-length number
- import-policy-drops number
- local-scope number
- missing-router-alert number
- non-local number
- out-of-memory-drops number
- reached-maximum-number-group-sources number
- reached-maximum-number-groups number
- reached-maximum-number-sources number
- reserved-scope number
- unknown-type number
- wrong-version number
- multicast-states
- source-group-entries number
- star-group-entries number
- received
- drops number
- general-queries number
- group-queries number
- group-source-queries number
- leaves number
- v1-reports number
- v2-reports number
- v3-reports number
- transmitted
- errors number
- general-queries number
- group-queries number
- group-source-queries number
+ subnet-check boolean
+ version number
- membership-groups
- group group string
- source source string
- blocked-interface interface-name string
- forwarding-interface interface-name string
- oper-state keyword
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ robust-count number
+ ssm
+ mappings
+ group-range start string end string
+ source source string
+ trace-options
+ trace
+ interface
+ all
+ name reference
+ packet
+ interface
+ all
+ name reference
+ modifier keyword
+ type keyword
+ igmp-snooping
+ admin-state keyword
+ interface interface-name string
+ fast-leave boolean
+ import-policy reference
- is-mrouter-port boolean
+ maximum-number-group-sources number
+ maximum-number-groups number

```

```

+ maximum-number-sources number
- membership-group-count number
- membership-groups
  - group group string
    - expiry-time number
    - filter-mode keyword
    - group-type keyword
    - igmp-compatibility-mode keyword
    - source source string
      - expiry-time number
      - forwarding-state keyword
      - source-type keyword
      - up-time string
    - up-time string
    - v1-host-timer number
    - v2-host-timer number
+ mrouter-port boolean
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ robust-count number
+ router-alert-check boolean
+ send-queries boolean
+ static-membership-groups
  + group group string
    + source source string
    + starg
- statistics
  - error
    - bad-encoding number
    - bad-igmp-checksum number
    - bad-length number
    - discarded-bgp-join-sync number
    - discarded-bgp-leave-sync number
    - import-policy-drops number
    - local-scope number
    - missing-router-alert number
    - out-of-memory-discarded-packets number
    - reached-maximum-number-group-sources number
    - reached-maximum-number-groups number
    - reached-maximum-number-sources number
    - send-query-configured-discarded-packets number
    - unknown-type number
    - wrong-version number
    - zero-source-ip-address number
  - forwarded
    - error-packets number
    - general-queries number
    - group-queries number
    - group-source-queries number
    - leave-messages number
    - unknown-type number
    - v1-reports number
    - v2-reports number
    - v3-reports number
  - multicast-states
    - source-group-entries number
    - star-group-entries number
  - received
    - bgp-join-sync number
    - bgp-leave-sync number
    - discarded-packets number
    - general-queries number
    - group-queries number

```

```

- group-source-queries number
- leave-messages number
- v1-reports number
- v2-reports number
- v3-reports number
- transmitted
- bgp-join-sync number
- bgp-leave-sync number
- error-packets number
- general-queries number
- group-queries number
- group-source-queries number
- leave-messages number
- v1-reports number
- v2-reports number
- v3-reports number
+ version number
- multicast-routers address string
- expiry-time number
- igmp-v3-states
- general-query-interval number
- general-response-interval number
- robust-count number
- interface string
- up-time string
- version number
- oper-state keyword
- proxy-evpn-membership-group-count number
- proxy-evpn-membership-groups
- group group string
- filter-mode keyword
- source source string
- up-time string
- up-time string
- v1-support boolean
- v2-support boolean
- v3-support boolean
- proxy-membership-group-count number
- proxy-membership-groups
- group group string
- filter-mode keyword
- source source string
- up-time string
- up-time string
- querier
- address string
- expiry-time number
- igmp-v3-states
- general-query-interval number
- general-response-interval number
- robust-count number
- interface string
- up-time string
- version number
+ query-interval number
+ query-source-address string
+ report-source-address string
+ robust-count number
+ trace-options
+ trace
+ packet
+ interface interface-name string
+ modifier keyword
+ source-mac source-mac string

```

```

- transmitted-bgp-smet-routes number
- vxlan-destination vtep (ipv4-address | ipv6-address) vni number
  - index number
  - is-evpn-proxy boolean
  - is-mrouter-port boolean
  - is-sbd boolean
  - membership-group-count number
  - membership-groups
    - group group string
      - expiry-time number
      - filter-mode keyword
      - group-type keyword
      - igmp-compatibility-mode keyword
      - source source string
        - expiry-time number
        - forwarding-state keyword
        - source-type keyword
        - up-time string
      - up-time string
      - v1-host-timer number
      - v2-host-timer number
    - statistics
      - discarded-smet number
      - received-smet number
+ isis
+ dynamic-label-block reference
- dynamic-label-block-status keyword
+ instance name string
+ admin-state keyword
+ attached-bit
+ ignore boolean
+ suppress boolean
+ authentication
+ csnp-authentication
+ check-received keyword
+ generate boolean
+ hello-authentication
+ check-received keyword
+ generate boolean
+ key
+ auth-password string
+ crypto-algorithm keyword
+ keychain reference
+ lsp-authentication
+ check-received keyword
+ generate boolean
+ psnp-authentication
+ check-received keyword
+ generate boolean
+ auto-cost
+ reference-bandwidth number
+ enable-csnp-on-p2p-links boolean
+ export-policy reference
+ graceful-restart
+ acceptable-duration number
+ helper-mode boolean
+ hello-padding keyword
- hostnames
  - system-id host-system-id string
  - hostname string
+ iid-tlv boolean
+ instance-id number
+ inter-level-propagation-policies
+ level1-to-level2

```

```

    + summary-address ip-prefix (ipv4-prefix | ipv6-prefix)
      + route-tag number
+ interface interface-name string
  - adjacency neighbor-system-id string adjacency-level string
  - area-address string
  - designated-is-system-id string
  - down-reason keyword
  - last-up-down-transition string
  - local-extended-circuit-id number
  - neighbor-circuit-type keyword
  - neighbor-extended-circuit-id number
  - neighbor-hostname string
  - neighbor-ipv4 string
  - neighbor-ipv6 string
  - neighbor-last-restart (keyword | date-and-time-delta)
  - neighbor-priority number
  - neighbor-restart-capable boolean
  - neighbor-restart-status keyword
  - neighbor-restarts number
  - neighbor-snpa string
  - nlpid keyword
  - remaining-holdtime number
  - state keyword
  - up-down-transitions number
+ admin-state keyword
+ authentication
+ hello-authentication
  + check-received keyword
  + generate boolean
+ key
  + auth-password string
  + crypto-algorithm keyword
+ keychain reference
- circuit-id number
+ circuit-type keyword
+ delay
  + delay-selection keyword
  - unidirectional-minimum-link-delay number
+ hello-padding keyword
+ interface-ref
  + interface reference
  + subinterface reference
+ ipv4-unicast
  + admin-state keyword
  + enable-bfd boolean
  + include-bfd-tlv boolean
+ ipv6-unicast
  + admin-state keyword
  + enable-bfd boolean
  + include-bfd-tlv boolean
+ ldp-synchronization
  + disable
  - duration number
  + end-of-lib boolean
  + hold-down-timer number
  - sync-state keyword
+ level level-number number
  + authentication
    + hello-authentication
      + check-received keyword
      + generate boolean
    + key
      + auth-password string
      + crypto-algorithm keyword

```

```

+ keychain reference
+ disable boolean
+ ipv6-unicast-metric number
+ metric number
+ passive boolean
+ priority number
- statistics
  - pdu pdu-name keyword
    - dropped number
    - processed number
    - received number
    - sent number
+ timers
  + hello-interval number
  + hello-multiplier number
+ loopfree-alternate-exclude boolean
- oper-state keyword
+ passive boolean
+ segment-routing
+ mpls
  + ipv4-adjacency-sid
    + assignment keyword
    - programmed-sids label-value number
      - adjacency-level keyword
      - neighbor-system-id string
    + static number
  + ipv4-node-sid
    + index number
  + ipv6-adjacency-sid
    + assignment keyword
    - programmed-sids label-value number
      - adjacency-level keyword
      - neighbor-system-id string
    + static number
  + ipv6-node-sid
    + index number
- statistics
  - adjacency-changes number
  - adjacency-number number
  - area-address-mismatches number
  - authentication-failures number
  - authentication-type-failures number
  - designated-is-changes number
  - max-area-address-mismatches number
  - rejected-adjacencies number
  - system-id-length-mismatches number
+ timers
  + csnp-interval number
  + lsp-pacing-interval number
+ trace-options
  + trace keyword
+ weighted-ecmp
  + load-balancing-weight (number | keyword)
+ ipv4-unicast
  + admin-state keyword
+ ipv6-unicast
  + admin-state keyword
  + multi-topology boolean
+ ldp-synchronization
  + end-of-lib boolean
  + hold-down-timer number
+ level level-number number
+ authentication
  + csnp-authentication

```

```

+ check-received keyword
+ generate boolean
+ hello-authentication
+ check-received keyword
+ generate boolean
+ key
+ auth-password string
+ crypto-algorithm keyword
+ keychain reference
+ lsp-authentication
+ check-received keyword
+ generate boolean
+ psnp-authentication
+ check-received keyword
+ generate boolean
- link-state-database
- lsp lsp-id string
- checksum number
- flags keyword
- id-length number
- is-type number
- maximum-area-addresses number
- pdu-length number
- pdu-type keyword
- remaining-lifetime number
- sequence-number number
- tlvs
- tlv type identityref
- area-address
- address string
- authentication
- authentication-key string
- crypto-type keyword
- extended-ipv4-reachability
- prefixes
- prefix prefix string
- metric number
- s-bit boolean
- subtlvs
- subtlv type identityref
- flags
- flags keyword
- type identityref
- ipv4-source-router-id
- router-id string
- type identityref
- ipv6-source-router-id
- router-id string
- type identityref
- prefix-sids
- prefix-sid value number
- algorithm number
- flags keyword
- tag
- tag32 number
- tag64
- tag64 number
- undefined-subtlvs
- undefined-subtlv type number
- length number
- value binary
- up-down boolean
- extended-is-reachability
- neighbors

```

```

- neighbor system-id string
- instances
  - instance id number
  - metric number
  - subtlvs
    - subtlv type identityref
    - adjacency-sids
      - adjacency-sid value number
      - flags keyword
      - weight number
    - admin-group
      - admin-group number
    - application-specific-link-attributes
      - legacy boolean
      - loop-free-alternate boolean
      - rsvp-te boolean
      - sr-policy boolean
      - sub-sub-tlvs
        - admin-group number
        - maximum-link-bandwidth number
        - min-max-unidirectional-link-delay
          - anomolous boolean
          - max-delay number
          - min-delay number
          - te-default-metric number
    - available-bandwidth
      - bandwidth binary
      - type identityref
    - bandwidth-constraints
      - bandwidth-constraint model-id number
      - constraints
        - constraint constraint-id number
        - bandwidth binary
    - extended-admin-group
      - extended-admin-group number
    - ipv4-interface-address
      - address string
    - ipv4-neighbor-address
      - address string
    - ipv6-interface-address
      - address string
    - ipv6-neighbor-address
      - address string
    - lan-adjacency-sids
      - lan-adjacency-sid value number
      - flags keyword
      - neighbor-id string
      - weight number
    - link-attributes
      - local-protection keyword
    - link-delay
      - a-bit boolean
      - delay number
    - link-delay-variation
      - delay number
    - link-id
      - local number
      - remote number
    - link-loss
      - a-bit boolean
      - link-loss number
    - link-protection-type
      - type keyword
    - max-link-bandwidth

```



```

-   - bandwidth binary
-   - max-reservable-link-bandwidth
-   - bandwidth binary
-   - min-max-link-delay
-   - a-bit boolean
-   - max-delay number
-   - min-delay number
-   - residual-bandwidth
-   - bandwidth binary
-   - te-default-metric
-   - metric number
-   - unconstrained-lsp
-   - count number
-   - type identityref
-   - unreserved-bandwidth
-   - setup-priority priority number
-   - bandwidth binary
-   - utilized-bandwidth
-   - bandwidth binary
-   - type identityref
-   - undefined-subtlvs
-   - undefined-subtlv type number
-   - length number
-   - value binary
- hostname
-   - hostname string
- instance-ids
-   - instance-id instance-id number
-   - topology-id number
- ipv4-external-reachability
-   - prefixes
-   - prefix prefix string
-   - default-metric
-   - flags keyword
-   - metric number
-   - delay-metric
-   - flags keyword
-   - metric number
-   - error-metric
-   - flags keyword
-   - metric number
-   - expense-metric
-   - flags keyword
-   - metric number
-   - up-down boolean
- ipv4-interface-addresses
-   - address string
- ipv4-internal-reachability
-   - prefixes
-   - prefix prefix string
-   - default-metric
-   - flags keyword
-   - metric number
-   - delay-metric
-   - flags keyword
-   - metric number
-   - error-metric
-   - flags keyword
-   - metric number
-   - expense-metric
-   - flags keyword
-   - metric number
-   - up-down boolean
- ipv4-srlgs

```

- **ipv4-srlg instance-number** *number*
- **flags** *keyword*
- **ipv4-interface-address** *string*
- **ipv4-neighbor-address** *string*
- **psn-number** *number*
- **srlg-value** *number*
- **system-id** *string*
- **ipv4-te-router-id**
  - **router-id** *string*
- **ipv6-interface-addresses**
  - **address** *string*
- **ipv6-reachability**
  - **prefixes**
    - **prefix prefix** *string*
      - **metric** *number*
      - **s-bit** *boolean*
      - **subtlvs**
        - **subtlv type** *identityref*
          - **flags**
            - **flags** *keyword*
            - **type** *identityref*
          - **ipv4-source-router-id**
            - **router-id** *string*
            - **type** *identityref*
          - **ipv6-source-router-id**
            - **router-id** *string*
            - **type** *identityref*
          - **prefix-sids**
            - **prefix-sid value** *number*
              - **algorithm** *number*
              - **flags** *keyword*
          - **tag**
            - **tag32** *number*
          - **tag64**
            - **tag64** *number*
        - **undefined-subtlvs**
          - **undefined-subtlv type** *number*
            - **length** *number*
            - **value** *binary*
        - **up-down** *boolean*
        - **x-bit** *boolean*
    - **ipv6-srlgs**
      - **ipv6-srlg instance-number** *number*
      - **flags** *keyword*
      - **ipv6-interface-address** *string*
      - **ipv6-neighbor-address** *string*
      - **psn-number** *number*
      - **srlg-value** *number*
      - **system-id** *string*
    - **ipv6-te-router-id**
      - **router-id** *string*
    - **is-alias-id**
      - **alias-id** *string*
    - **is-reachability**
      - **neighbors**
        - **neighbor system-id** *string*
          - **default-metric**
            - **flags** *keyword*
            - **metric** *number*
          - **delay-metric**
            - **flags** *keyword*
            - **metric** *number*
          - **error-metric**
            - **flags** *keyword*

```

- metric number
- expense-metric
- flags keyword
- metric number
- isis-neighbor-attribute
- neighbors
- neighbor system-id string
- instances
- instance id number
- metric number
- subtlvs
- subtlv type identityref
- adjacency-sids
- adjacency-sid value number
- flags keyword
- weight number
- admin-group
- admin-group number
- available-bandwidth
- bandwidth binary
- type identityref
- bandwidth-constraints
- bandwidth-constraint model-id number
- constraints
- constraint constraint-id number
- bandwidth binary
- extended-admin-group
- extended-admin-group number
- ipv4-interface-address
- address string
- ipv4-neighbor-address
- address string
- ipv6-interface-address
- address string
- ipv6-neighbor-address
- address string
- lan-adjacency-sids
- lan-adjacency-sid value number
- flags keyword
- neighbor-id string
- weight number
- link-attributes
- local-protection keyword
- link-delay
- a-bit boolean
- delay number
- link-delay-variation
- delay number
- link-id
- local number
- remote number
- link-loss
- a-bit boolean
- link-loss number
- link-protection-type
- type keyword
- max-link-bandwidth
- bandwidth binary
- max-reservable-link-bandwidth
- bandwidth binary
- min-max-link-delay
- a-bit boolean
- max-delay number
- min-delay number

```

```

- residual-bandwidth
  - bandwidth binary
- te-default-metric
  - metric number
- unconstrained-lsp
  - count number
  - type identityref
- unreserved-bandwidth
  - setup-priority priority number
  - bandwidth binary
- utilized-bandwidth
  - bandwidth binary
  - type identityref
- undefined-subtlvs
  - undefined-subtlv type number
  - length number
  - value binary
- lsp-buffer-size
  - size number
- mt-ipv4-reachability
  - prefixes
    - prefix mt-id number prefix string
    - metric number
    - s-bit boolean
    - subtlvs
      - subtlv type identityref
      - flags
        - flags keyword
        - type identityref
      - ipv4-source-router-id
        - router-id string
        - type identityref
      - ipv6-source-router-id
        - router-id string
        - type identityref
      - prefix-sids
        - prefix-sid value number
        - algorithm number
        - flags keyword
      - tag
        - tag32 number
      - tag64
        - tag64 number
    - undefined-subtlvs
      - undefined-subtlv type number
      - length number
      - value binary
    - up-down boolean
- mt-ipv6-reachability
  - prefixes
    - prefix prefix string mt-id number
    - metric number
    - s-bit boolean
    - subtlvs
      - subtlv type identityref
      - flags
        - flags keyword
        - type identityref
      - ipv4-source-router-id
        - router-id string
        - type identityref
      - ipv6-source-router-id
        - router-id string
        - type identityref

```

```

- prefix-sids
  - prefix-sid value number
  - algorithm number
  - flags keyword
- tag
  - tag32 number
- tag64
  - tag64 number
- undefined-subtlvs
  - undefined-subtlv type number
  - length number
  - value binary
- up-down boolean
- x-bit boolean
- mt-isis-neighbor-attribute
- neighbors
  - neighbor mt-id number system-id string
  - instances
    - instance id number
    - metric number
    - subtlvs
      - subtlv type identityref
      - adjacency-sids
        - adjacency-sid value number
        - flags keyword
        - weight number
      - admin-group
        - admin-group number
      - application-specific-link-attributes
        - legacy boolean
        - loop-free-alternate boolean
        - rsvp-te boolean
        - sr-policy boolean
        - sub-sub-tlvs
          - admin-group number
          - maximum-link-bandwidth number
          - min-max-unidirectional-link-delay
            - anomalous boolean
            - max-delay number
            - min-delay number
            - te-default-metric number
      - available-bandwidth
        - bandwidth binary
        - type identityref
      - bandwidth-constraints
        - bandwidth-constraint model-id number
        - constraints
          - constraint constraint-id number
          - bandwidth binary
      - extended-admin-group
        - extended-admin-group number
      - ipv4-interface-address
        - address string
      - ipv4-neighbor-address
        - address string
      - ipv6-interface-address
        - address string
      - ipv6-neighbor-address
        - address string
      - lan-adjacency-sids
        - lan-adjacency-sid value number
        - flags keyword
        - neighbor-id string
        - weight number

```

- **link-attributes**
  - **local-protection** *keyword*
- **link-delay**
  - **a-bit** *boolean*
  - **delay** *number*
- **link-delay-variation**
  - **delay** *number*
- **link-id**
  - **local** *number*
  - **remote** *number*
- **link-loss**
  - **a-bit** *boolean*
  - **link-loss** *number*
- **link-protection-type**
  - **type** *keyword*
- **max-link-bandwidth**
  - **bandwidth** *binary*
- **max-reservable-link-bandwidth**
  - **bandwidth** *binary*
- **min-max-link-delay**
  - **a-bit** *boolean*
  - **max-delay** *number*
  - **min-delay** *number*
- **residual-bandwidth**
  - **bandwidth** *binary*
- **te-default-metric**
  - **metric** *number*
- **unconstrained-lsp**
  - **count** *number*
  - **type** *identityref*
- **unreserved-bandwidth**
  - **setup-priority** *priority* *number*
  - **bandwidth** *binary*
- **utilized-bandwidth**
  - **bandwidth** *binary*
  - **type** *identityref*
- **undefined-subtlvs**
  - **undefined-subtlv** *type* *number*
    - **length** *number*
    - **value** *binary*
- **mt-isn**
  - **neighbors**
    - **neighbor** *mt-id* *number* *system-id* *string*
    - **instances**
      - **instance** *id* *number*
      - **metric** *number*
      - **subtlvs**
        - **subtlv** *type* *identityref*
          - **adjacency-sids**
            - **adjacency-sid** *value* *number*
              - **flags** *keyword*
              - **weight** *number*
          - **admin-group**
            - **admin-group** *number*
        - **application-specific-link-attributes**
          - **legacy** *boolean*
          - **loop-free-alternate** *boolean*
          - **rsvp-te** *boolean*
          - **sr-policy** *boolean*
          - **sub-sub-tlvs**
            - **admin-group** *number*
            - **maximum-link-bandwidth** *number*
            - **min-max-unidirectional-link-delay**
              - **anomalous** *boolean*

```

- max-delay number
- min-delay number
- te-default-metric number
- available-bandwidth
- bandwidth binary
- type identityref
- bandwidth-constraints
- bandwidth-constraint model-id number
- constraints
- constraint constraint-id number
- bandwidth binary
- extended-admin-group
- extended-admin-group number
- ipv4-interface-address
- address string
- ipv4-neighbor-address
- address string
- ipv6-interface-address
- address string
- ipv6-neighbor-address
- address string
- lan-adjacency-sids
- lan-adjacency-sid value number
- flags keyword
- neighbor-id string
- weight number
- link-attributes
- local-protection keyword
- link-delay
- a-bit boolean
- delay number
- link-delay-variation
- delay number
- link-id
- local number
- remote number
- link-loss
- a-bit boolean
- link-loss number
- link-protection-type
- type keyword
- max-link-bandwidth
- bandwidth binary
- max-reservable-link-bandwidth
- bandwidth binary
- min-max-link-delay
- a-bit boolean
- max-delay number
- min-delay number
- residual-bandwidth
- bandwidth binary
- te-default-metric
- metric number
- unconstrained-lsp
- count number
- type identityref
- unreserved-bandwidth
- setup-priority priority number
- bandwidth binary
- utilized-bandwidth
- bandwidth binary
- type identityref
- undefined-subtlvs
- undefined-subtlv type number

```

```

- length number
- value binary
- multi-topology
  - topologies
    - topology mt-id number
    - attributes keyword
- nlpid
  - nlpid keyword
- purge-oi
  - received-system-id string
  - source-system-id string
  - system-id-count number
- router-capabilities
  - capability instance-number number
  - flags keyword
  - router-id string
  - subtlvs
    - subtlv type identityref
      - node-msds
        - bmi-msd number
        - erld-msd number
      - sbfd-discriminators
        - discriminator number
      - segment-routing-algorithms
        - algorithm keyword
      - segment-routing-capability
        - flags keyword
        - srgb-descriptors
          - srgb-descriptor range number
          - label number
- undefined-tlvs
  - undefined-tlv type number
  - length number
  - value binary
- version number
- version2 number
+ loopfree-alternate-exclude boolean
+ metric-style keyword
+ route-preference
+ external number
+ internal number
- statistics
  - authentication-failures number
  - authentication-type-failures number
  - corrupted-lsps number
  - database-overloads number
  - exceeded-max-sequence-number number
  - lsp-errors number
  - manual-address-drop-from-area number
  - max-area-address-mismatches number
  - own-lsp-purges number
  - sequence-number-skips number
  - spf-runs number
  - system-id-length-mismatches number
  - total-lsps number
+ trace-options
  + trace keyword
+ level-capability keyword
- level-database level-number number lsp-id string
  - attributes
    - attached boolean
    - level1-is-type boolean
    - level2-is-type boolean
    - overload boolean

```



```

- checksum string
- defined-tlvs
- application-specific-srlg neighbor string
  - legacy boolean
  - loop-free-alternate boolean
  - rsvp-te boolean
  - sr-policy boolean
  - sub-tlvs
    - ipv4-interface-address string
    - ipv4-neighbor-address string
    - ipv6-interface-address string
    - ipv6-neighbor-address string
    - link-local-identifier number
    - link-remote-identifier number
    - shared-risk-link-group number
- area-addresses string
- authentication
  - auth-data string
  - auth-type keyword
- extended-ipv4-reachability ipv4-prefix string
  - down boolean
  - metric number
  - sub-tlvs
    - prefix-attribute-flags
      - external-prefix boolean
      - node-identifier boolean
      - re-advertised boolean
    - route-tag-32bit number
    - route-tag-64bit number
    - segment-routing-prefix-sid
      - algorithm keyword
      - explicit-null boolean
      - local boolean
      - node-sid boolean
      - penultimate-hop-popping boolean
      - re-advertised boolean
      - sr-index-or-label number
      - value boolean
- extended-is-reachability neighbor string
  - default-metric number
  - sub-tlvs
    - admin-group number
    - application-specific-link-attributes
      - legacy boolean
      - loop-free-alternate boolean
      - rsvp-te boolean
      - sr-policy boolean
      - sub-sub-tlvs
        - admin-group number
        - maximum-link-bandwidth number
        - min-max-unidirectional-link-delay
          - anomolous boolean
          - max-delay number
          - min-delay number
        - te-default-metric number
    - ipv4-interface-address string
    - ipv4-neighbor-address string
    - ipv6-interface-address string
    - ipv6-neighbor-address string
    - link-msd
      - msd-info msd-type (keyword | number) msd-value number
    - maximum-link-bandwidth number
    - min-max-unidirectional-link-delay
      - anomolous boolean

```

```

- max-delay number
- min-delay number
- segment-routing-adjacency-sid sr-index-or-label number
  - adj-set boolean
  - backup boolean
  - ipv6-family boolean
  - local boolean
  - persistent boolean
  - value boolean
  - weight number
- segment-routing-lan-adjacency-sid sr-index-or-label number
  - adj-set boolean
  - backup boolean
  - ipv6-family boolean
  - local boolean
  - neighbor-system-id string
  - persistent boolean
  - value boolean
  - weight number
- te-default-metric number
- hostname string
- ipv4-external-reachability ipv4-prefix string
  - default-metric number
  - default-metric-type keyword
  - down boolean
- ipv4-interface-addresses (ipv4-address | ipv6-address)
- ipv4-internal-reachability ipv4-prefix string
  - default-metric number
  - default-metric-type keyword
  - down boolean
- ipv4-srlg neighbor string
  - ipv4-interface-address string
  - ipv4-neighbor-address string
  - numbered boolean
  - shared-risk-link-group number
- ipv6-interface-addresses (ipv4-address | ipv6-address)
- ipv6-reachability ipv6-prefix string
  - down boolean
  - external boolean
  - metric number
  - sub-tlvs
    - prefix-attribute-flags
      - external-prefix boolean
      - node-identifier boolean
      - re-advertised boolean
    - route-tag-32bit number
    - route-tag-64bit number
    - segment-routing-prefix-sid
      - algorithm keyword
      - explicit-null boolean
      - local boolean
      - node-sid boolean
      - penultimate-hop-popping boolean
      - re-advertised boolean
      - sr-index-or-label number
      - value boolean
- ipv6-srlg neighbor string
  - ipv6-interface-address string
  - ipv6-neighbor-address string
  - neighbor-address-included boolean
  - shared-risk-link-group number
- ipv6-te-router-id string
- is-reachability neighbor string
  - default-metric number

```

- **default-metric-type** *keyword*
- **mt-ipv4-reachability ipv4-prefix** *string*
- **down** *boolean*
- **metric** *number*
- **mt-id** *number*
- **sub-tlvs**
  - **prefix-attribute-flags**
    - **external-prefix** *boolean*
    - **node-identifier** *boolean*
    - **re-advertised** *boolean*
  - **route-tag-32bit** *number*
  - **route-tag-64bit** *number*
  - **segment-routing-prefix-sid**
    - **algorithm** *keyword*
    - **explicit-null** *boolean*
    - **local** *boolean*
    - **node-sid** *boolean*
    - **penultimate-hop-popping** *boolean*
    - **re-advertised** *boolean*
    - **sr-index-or-label** *number*
    - **value** *boolean*
- **mt-ipv6-reachability ipv6-prefix** *string*
- **down** *boolean*
- **external** *boolean*
- **metric** *number*
- **mt-id** *number*
- **sub-tlvs**
  - **prefix-attribute-flags**
    - **external-prefix** *boolean*
    - **node-identifier** *boolean*
    - **re-advertised** *boolean*
  - **route-tag-32bit** *number*
  - **route-tag-64bit** *number*
  - **segment-routing-prefix-sid**
    - **algorithm** *keyword*
    - **explicit-null** *boolean*
    - **local** *boolean*
    - **node-sid** *boolean*
    - **penultimate-hop-popping** *boolean*
    - **re-advertised** *boolean*
    - **sr-index-or-label** *number*
    - **value** *boolean*
- **mt-is-reachability neighbor** *string*
- **default-metric** *number*
- **mt-id** *number*
- **sub-tlvs**
  - **admin-group** *number*
  - **application-specific-link-attributes**
    - **legacy** *boolean*
    - **loop-free-alternate** *boolean*
    - **rsvp-te** *boolean*
    - **sr-policy** *boolean*
    - **sub-sub-tlvs**
      - **admin-group** *number*
      - **maximum-link-bandwidth** *number*
      - **min-max-unidirectional-link-delay**
        - **anomolous** *boolean*
        - **max-delay** *number*
        - **min-delay** *number*
      - **te-default-metric** *number*
  - **ipv4-interface-address** *string*
  - **ipv4-neighbor-address** *string*
  - **ipv6-interface-address** *string*
  - **ipv6-neighbor-address** *string*

```

- link-msd
  - msd-info msd-type (keyword | number) msd-value number
- maximum-link-bandwidth number
- min-max-unidirectional-link-delay
  - anomalous boolean
  - max-delay number
  - min-delay number
- segment-routing-adjacency-sid sr-index-or-label number
  - adj-set boolean
  - backup boolean
  - ipv6-family boolean
  - local boolean
  - persistent boolean
  - value boolean
  - weight number
- segment-routing-lan-adjacency-sid sr-index-or-label number
  - adj-set boolean
  - backup boolean
  - ipv6-family boolean
  - local boolean
  - neighbor-system-id string
  - persistent boolean
  - value boolean
  - weight number
- te-default-metric number
- multi-topology
  - topology mt-id number
  - attached boolean
  - overload boolean
- nlpid keyword
- purge-oi string
- router-capability
  - leaked-down boolean
  - router-id string
  - scope-is-domain-wide boolean
- sub-tlvs
  - node-msd
    - msd-info msd-type (keyword | number) msd-value number
  - sr-algorithm
    - algorithm number
  - sr-capabilities
    - ipv4-support boolean
    - ipv6-support boolean
    - srgb-descriptor sr-index-or-label number range number
  - sr-local-block
    - srlb-descriptor sr-index-or-label number range number
- te-router-id string
- maximum-area-addresses number
- pdu-length number
- pdu-type number
- pkt-version number
- remaining-lifetime number
- sequence-number string
- system-id-len number
- undefined-tlvs string
- version number
+ loopfree-alternate
+ admin-state keyword
+ augment-route-table boolean
+ exclude
+ prefix-policy reference
+ multi-homed-prefix
+ admin-state keyword
+ preference keyword

```

```

+ remote-lfa
+   admin-state keyword
+   max-pq-cost number
+   node-protect
+     admin-state keyword
+     max-pq-nodes number
+ ti-lfa
+   admin-state keyword
+   max-sr-policy-lfa-labels number
+   node-protect
+     admin-state keyword
+ max-ecmp-paths number
+ net string
- oper-area-id string
- oper-state keyword
- oper-system-id string
+ overload
+   advertise-external boolean
+   advertise-interlevel boolean
+   immediate
+     max-metric boolean
+     set-bit boolean
-   instance-is-in-overload boolean
+   on-boot
+     max-metric boolean
+     set-bit boolean
+     timeout number
+ poi-tlv boolean
- restarting-neighbor-list
-   neighbor system-id string
-     hostname string
+ segment-routing
+   mpls
+     adjacency-sid-hold-time (keyword | number)
+     dynamic-adjacency-sids
+       all-interfaces boolean
+     entropy-label
+       advertise-capability boolean
+       transmit keyword
+     maximum-sid-depth
+       override-bmi number
+       override-erld number
-     sid-database
-       prefix-sid prefix (ipv4-prefix | ipv6-prefix) sid-label-
value number multi-topology-id number algorithm number
-       active boolean
-       prefix-conflict boolean
-       sid-conflict boolean
-       sid-out-of-range boolean
-       source-router system-id string level-number number
-       flags
-         explicit-null boolean
-         local boolean
-         node-sid boolean
-         penultimate-hop-popping boolean
-         re-advertised boolean
-         local-system boolean
+       static-label-block reference
-       static-label-block-status keyword
- statistics
-   last-partial-spf string
-   last-spf string
-   partial-spf-runs number
-   pdu pdu-name keyword

```

```

- dropped number
- processed number
- received number
- sent number
- spf-runs number
+ te-database-install
+ bgp-ls
+ bgp-ls-identifier number
+ igp-identifier number
+ timers
+ lsp-generation
+ initial-wait number
+ max-wait number
+ second-wait number
+ lsp-lifetime number
+ lsp-refresh
+ half-lifetime boolean
+ interval number
+ spf
+ initial-wait number
+ max-wait number
+ second-wait number
+ trace-options
+ trace keyword
+ traffic-engineering
+ advertisement boolean
+ ipv4-te-router-id string
+ ipv6-te-router-id string
+ legacy-link-attribute-advertisement boolean
+ transport
+ lsp-mtu-size number
+ weighted-ecmp
+ admin-state keyword
+ max-ecmp-hash-buckets-per-next-hop-group number
+ non-stop-forwarding
+ admin-state keyword
+ ldp
+ admin-state keyword
+ discovery
+ interfaces
+ hello-holdtime number
+ hello-interval number
+ interface name string
+ hello-holdtime number
+ hello-interval number
+ ipv4
+ admin-state keyword
+ enable-bfd boolean
- hello-adjacencies
- adjacency lsr-id reference label-space-id reference
- hello-holdtime
- negotiated number
- neighbor-proposed number
- remaining number
- hello-received number
- hello-sent number
- local-address string
- remote-address string
- intf-oper-down-reason keyword
- last-oper-state-change string
- oper-state keyword
+ override-lsr-id
+ local-subinterface keyword
- statistics

```

```

- hello-message-errors
  - bad-message-length number
  - bad-pdu-length number
  - bad-protocol-version number
  - malformed-tlv-value number
- hello-received number
- hello-sent number
+ trace-options
+ trace keyword
+ ipv6
+ admin-state keyword
+ enable-bfd boolean
- hello-adjacencies
  - adjacency lsr-id reference label-space-id reference
    - hello-holdtime
      - negotiated number
      - neighbor-proposed number
      - remaining number
    - hello-received number
    - hello-sent number
    - local-address string
    - remote-address string
  - intf-oper-down-reason keyword
  - last-oper-state-change string
  - oper-state keyword
+ override-lsr-id
+ local-subinterface keyword
- statistics
  - hello-message-errors
    - bad-message-length number
    - bad-pdu-length number
    - bad-protocol-version number
    - malformed-tlv-value number
  - hello-received number
  - hello-sent number
+ trace-options
+ trace keyword
+ trace-options
+ trace keyword
+ targeted
+ hello-holdtime number
+ hello-interval number
+ ipv4
+ auto-rx
+ admin-state keyword
+ advertise-fec boolean
+ auto-tx
+ admin-state keyword
+ advertise-fec boolean
+ target remote-address string
+ admin-state keyword
+ advertise-fec boolean
+ enable-bfd boolean
- hello-adjacencies
  - adjacency lsr-id reference label-space-id reference
    - hello-holdtime
      - negotiated number
      - neighbor-proposed number
      - remaining number
    - hello-received number
    - hello-sent number
    - local-address string
    - remote-address string
+ hello-holdtime number

```

```

+ hello-interval number
- last-oper-state-change string
- oper-state keyword
- oper-type keyword
+ override-lsr-id
+ subinterface-ipv4 string
- statistics
- hello-message-errors
- bad-message-length number
- bad-pdu-length number
- bad-protocol-version number
- malformed-tlv-value number
- target-oper-down-reason keyword
+ ipv6
+ target remote-address string
+ admin-state keyword
+ advertise-fec boolean
+ enable-bfd boolean
- hello-adjacencies
- adjacency lsr-id reference label-space-id reference
- hello-holdtime
- negotiated number
- neighbor-proposed number
- remaining number
- hello-received number
- hello-sent number
- local-address string
- remote-address string
+ hello-holdtime number
+ hello-interval number
- last-oper-state-change string
- oper-state keyword
- oper-type keyword
+ override-lsr-id
+ subinterface-ipv4 string
+ subinterface-ipv6 string
- statistics
- hello-message-errors
- bad-message-length number
- bad-pdu-length number
- bad-protocol-version number
- malformed-tlv-value number
- target-oper-down-reason keyword
+ dynamic-label-block reference
- dynamic-label-block-status keyword
+ entropy-label
+ advertise-capability boolean
+ export-prefix-policy reference
+ fec-resolution
+ longest-prefix boolean
+ graceful-restart
+ helper-enable boolean
+ max-reconnect-time number
+ max-recovery-time number
+ import-prefix-policy reference
+ ipv4
- bindings
- advertised-address
- peer lsr-id reference label-space-id reference
- ip-address string
- advertised-prefix-fec
- prefix-fec fec string lsr-id reference label-space-id reference
- egress-lsr-fec boolean
- label (number | keyword)

```



```

- label-status keyword
- label-type keyword
- received-address
- peer lsr-id reference label-space-id reference
- ip-address string
- received-prefix-fec
- prefix-fec fec string lsr-id reference label-space-id reference
- entropy-label-transmit boolean
- ingress-lsr-fec boolean
- label (number | keyword)
- next-hop index number
- interface string
- next-hop (ipv4-address | ipv6-address)
- next-hop-type keyword
- outer-label (number | keyword)
- not-used-reason keyword
- used-in-forwarding boolean
- service-fec128 virtual-circuit-type keyword virtual-circuit-
identifier number peer-lsr-id (ipv4-address | ipv6-address)
- advertised
- control-word boolean
- flow-aware-transport-label-receive-capability boolean
- flow-aware-transport-label-transmit-capability boolean
- l2-mtu number
- label (number | keyword)
- label-status keyword
- pw-status boolean
- signaling-status keyword
- withdraw-reason keyword
- binding-oper-down-reason keyword
- binding-oper-state keyword
- received
- control-word boolean
- flow-aware-transport-label-receive-capability boolean
- flow-aware-transport-label-transmit-capability boolean
- l2-mtu number
- label (number | keyword)
- label-status keyword
- pw-status boolean
- signaling-status keyword
- last-oper-state-change string
- lsr-id string
- oper-down-reason keyword
- oper-state keyword
- oper-up-to-down-transitions number
+ ipv6
- bindings
- advertised-address
- peer lsr-id reference label-space-id reference
- ip-address string
- advertised-prefix-fec
- prefix-fec fec string lsr-id reference label-space-id reference
- egress-lsr-fec boolean
- label (number | keyword)
- label-status keyword
- label-type keyword
- received-address
- peer lsr-id reference label-space-id reference
- ip-address string
- received-prefix-fec
- prefix-fec fec string lsr-id reference label-space-id reference
- entropy-label-transmit boolean
- ingress-lsr-fec boolean
- label (number | keyword)

```

```

- next-hop index number
- interface string
- next-hop (ipv4-address | ipv6-address)
- next-hop-type keyword
- outer-label (number | keyword)
- not-used-reason keyword
- used-in-forwarding boolean
- service-fec128 virtual-circuit-type keyword virtual-circuit-
identifier number peer-lsr-id (ipv4-address | ipv6-address)
- advertised
- control-word boolean
- flow-aware-transport-label-receive-capability boolean
- flow-aware-transport-label-transmit-capability boolean
- l2-mtu number
- label (number | keyword)
- label-status keyword
- pw-status boolean
- signaling-status keyword
- withdraw-reason keyword
- binding-oper-down-reason keyword
- binding-oper-state keyword
- received
- control-word boolean
- flow-aware-transport-label-receive-capability boolean
- flow-aware-transport-label-transmit-capability boolean
- l2-mtu number
- label (number | keyword)
- label-status keyword
- pw-status boolean
- signaling-status keyword
- last-oper-state-change string
- lsr-id string
- oper-down-reason keyword
- oper-state keyword
- oper-up-to-down-transitions number
+ loopfree-alternate
+ admin-state keyword
+ multipath
+ max-paths number
+ peers
+ peer lsr-id (ipv4-address-unicast | ipv6-address-unicast-without-local) label-
space-id number
- adjacency-type keyword
+ adv-local-lsr-id boolean
- end-of-lib
- ipv4-prefix-fecs
- received boolean
- sent boolean
- ipv6-prefix-fecs
- received boolean
- sent boolean
+ export-prefix-policy reference
+ fec-limit number
- fec-limit-exceeded boolean
- graceful-restart
- peer-reconnect-time number
- peer-recovery-time number
- peer-restarting boolean
+ import-prefix-policy reference
- label-advertisement-mode
- negotiated keyword
- last-oper-state-change string
- overload
- local-router-is-overloaded boolean

```

- **peer-is-overloaded** *boolean*
- **received-capabilities**
  - **dual-stack-capability** *boolean*
  - **dynamic-capability** *boolean*
  - **entropy-label-capability** *boolean*
  - **graceful-restart-capability** *boolean*
  - **make-before-break-capability** *boolean*
  - **multipoint-to-multipoint-capability** *boolean*
  - **nokia-vendor-overload-capability** *boolean*
  - **point-to-multipoint-capability** *boolean*
  - **state-advertisement-control**
    - **ipv4-prefix-disable** *boolean*
    - **ipv6-prefix-disable** *boolean*
    - **p2p-pseudowire-fec-128-disable** *boolean*
    - **p2p-pseudowire-fec-129-disable** *boolean*
  - **unrecognized-notification-capability** *boolean*
- **session-holdtime**
  - **negotiated** *number*
  - **peer-proposed** *number*
  - **remaining** *number*
- **session-state** *keyword*
- **statistics**
  - **address-statistics**
    - **ipv4**
      - **advertised-addresses** *number*
      - **received-addresses** *number*
    - **ipv6**
      - **advertised-addresses** *number*
      - **received-addresses** *number*
  - **fec-statistics**
    - **ipv4-prefix**
      - **advertised-fecs** *number*
      - **received-fecs** *number*
    - **ipv6-prefix**
      - **advertised-fecs** *number*
      - **received-fecs** *number*
  - **received-messages**
    - **address** *number*
    - **address-withdraw** *number*
    - **capability** *number*
    - **initialization** *number*
    - **keepalive** *number*
    - **label-abort-request** *number*
    - **label-mapping** *number*
    - **label-release** *number*
    - **label-request** *number*
    - **label-withdraw** *number*
    - **notification** *number*
    - **total-messages** *number*
  - **sent-messages**
    - **address** *number*
    - **address-withdraw** *number*
    - **capability** *number*
    - **initialization** *number*
    - **keepalive** *number*
    - **label-abort-request** *number*
    - **label-mapping** *number*
    - **label-release** *number*
    - **label-request** *number*
    - **label-withdraw** *number*
    - **notification** *number*
    - **total-messages** *number*
- + **tcp-transport**
  - **local-address** (*ipv4-address* | *ipv6-address*)

```

    - local-port number
    - remote-address (ipv4-address | ipv6-address)
    - remote-port number
  + trace-options
    + trace keyword
  + session-keepalive-holdtime number
  + session-keepalive-interval number
  + trace-options
    + trace keyword
+ static-fec fec-prefix (ipv4-prefix | ipv6-prefix)
+ swap boolean
- statistics
  - fec-statistics
    - ipv4-prefix
      - advertised-fecs number
      - received-fecs number
    - ipv6-prefix
      - advertised-fecs number
      - received-fecs number
  - ipv4
    - total-discovery-interfaces number
    - total-discovery-targets number
    - total-interface-hello-adjacencies number
    - total-peers number
    - total-targeted-hello-adjacencies number
  - ipv6
    - total-discovery-interfaces number
    - total-discovery-targets number
    - total-interface-hello-adjacencies number
    - total-peers number
    - total-targeted-hello-adjacencies number
  - protocol-errors
    - bad-ldp-identifier number
    - bad-message-length number
    - bad-pdu-length number
    - bad-protocol-version number
    - bad-tlv-length number
    - malformed-tlv-value number
    - missing-message-parameters number
    - session-rejected-bad-keepalive-time number
    - session-rejected-no-hello number
    - session-rejected-parameters-adv-mode number
    - session-rejected-parameters-label-range number
    - session-rejected-parameters-max-pdu-length number
    - unknown-message-type number
    - unknown-tlv number
    - unsupported-address-family number
    - sessions-terminated-holdtime-expiry number
  + tunnel-down-damp-time number
+ linux
+ export-neighbors boolean
+ export-routes boolean
+ import-routes boolean
+ mld
+ admin-state keyword
- group-count number
+ interface interface-name string
  + admin-state keyword
  - group-count number
  + import-policy reference
  + maximum-number-group-sources number
  + maximum-number-groups number
  + maximum-number-sources number
  - membership-groups

```

```

- group group string
  - expiry-time number
  - filter-mode keyword
  - group-type keyword
  - last-reporter (ipv4-address | ipv6-address)
  - mld-compatibility-mode keyword
  - source source string
    - expiry-time number
    - forwarding-state keyword
    - source-type keyword
    - up-time string
  - up-time string
  - v1-host-timer number
- oper-state keyword
- oper-version number
- querier
  - address string
  - expiry-time number
  - up-time string
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ router-alert-check boolean
+ ssm
  + mappings
    + group-range start string end string
      + source source string
  + static-membership-groups
    + group-range start string end string
      + source source string
      + starg
- statistics
  - error
    - bad-encoding number
    - bad-length number
    - import-policy-drops number
    - local-scope number
    - missing-router-alert number
    - non-local number
    - out-of-memory-drops number
    - reached-maximum-number-group-sources number
    - reached-maximum-number-groups number
    - reached-maximum-number-sources number
    - reserved-scope number
    - unknown-type number
    - wrong-version number
  - multicast-states
    - source-group-entries number
    - star-group-entries number
  - received
    - drops number
    - general-queries number
    - group-queries number
    - group-source-queries number
    - leaves number
    - v1-reports number
    - v2-reports number
  - transmitted
    - errors number
    - general-queries number
    - group-queries number
    - group-source-queries number
+ version number
- membership-groups

```

```

- group group string
  - source source string
  - blocked-interface interface-name string
  - forwarding-interface interface-name string
- oper-state keyword
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ robust-count number
+ ssm
+ mappings
  + group-range start string end string
  + source source string
+ trace-options
+ trace
  + interface
  + all
  + name reference
  + packet
  + interface
  + all
  + name reference
  + modifier keyword
  + type keyword
+ mld-snooping
+ admin-state keyword
+ interface interface-name string
+ fast-leave boolean
+ import-policy reference
- is-mrouter-port boolean
+ maximum-number-group-sources number
+ maximum-number-groups number
+ maximum-number-sources number
- membership-group-count number
- membership-groups
  - group group string
  - expiry-time number
  - filter-mode keyword
  - group-type keyword
  - mld-compatibility-mode keyword
  - source source string
  - expiry-time number
  - forwarding-state keyword
  - source-type keyword
  - up-time string
  - up-time string
  - vl-host-timer number
+ mrouter-port boolean
+ query-interval number
+ query-last-member-interval number
+ query-response-interval number
+ robust-count number
+ router-alert-check boolean
+ send-queries boolean
+ static-membership-groups
  + group group string
  + source source string
  + starg
- statistics
  - error
  - bad-encoding number
  - bad-length number
  - bad-mld-checksum number
  - discarded-bgp-join-sync number

```

```

- discarded-bgp-leave-sync number
- import-policy-drops number
- local-scope number
- missing-router-alert number
- out-of-memory-discarded-packets number
- reached-maximum-number-group-sources number
- reached-maximum-number-groups number
- reached-maximum-number-sources number
- send-query-configured-discarded-packets number
- unknown-type number
- wrong-version number
- zero-source-ip-address number
- forwarded
- error-packets number
- general-queries number
- group-queries number
- group-source-queries number
- leave-messages number
- unknown-type number
- v1-reports number
- v2-reports number
- multicast-states
- source-group-entries number
- star-group-entries number
- received
- bgp-join-sync number
- bgp-leave-sync number
- discarded-packets number
- general-queries number
- group-queries number
- group-source-queries number
- leave-messages number
- v1-reports number
- v2-reports number
- transmitted
- bgp-join-sync number
- bgp-leave-sync number
- error-packets number
- general-queries number
- group-queries number
- group-source-queries number
- leave-messages number
- v1-reports number
- v2-reports number
+ version number
- multicast-routers address string
- expiry-time number
- interface string
- mld-v2-states
- general-query-interval number
- general-response-interval number
- robust-count number
- up-time string
- version number
- oper-state keyword
- proxy-evpn-membership-group-count number
- proxy-evpn-membership-groups
- group group string
- filter-mode keyword
- source source string
- up-time string
- up-time string
- v1-support boolean
- v2-support boolean

```

```

- proxy-membership-group-count number
- proxy-membership-groups
  - group group string
    - filter-mode keyword
    - source source string
    - up-time string
    - up-time string
- querier
  - address string
  - expiry-time number
  - interface string
  - mld-v2-states
    - general-query-interval number
    - general-response-interval number
    - robust-count number
  - up-time string
  - version number
+ query-interval number
+ query-source-address string
+ report-source-address string
+ robust-count number
+ trace-options
+ trace
  + packet
    + interface interface-name string
    + modifier keyword
    + source-mac source-mac string
- transmitted-bgp-smet-routes number
- vxlan-destination vtep (ipv4-address | ipv6-address) vni number
  - index number
  - is-evpn-proxy boolean
  - is-mrouter-port boolean
  - is-sbd boolean
  - membership-group-count number
  - membership-groups
    - group group string
      - expiry-time number
      - filter-mode keyword
      - group-type keyword
      - mld-compatibility-mode keyword
      - source source string
        - expiry-time number
        - forwarding-state keyword
        - source-type keyword
        - up-time string
      - up-time string
      - vl-host-timer number
    - statistics
      - discarded-smet number
      - received-smet number
+ ospf
+ instance name string
+ address-family identityref
+ admin-state keyword
+ advertise-router-capability keyword
+ area area-id
  - active-interfaces number
+ advertise-router-capability boolean
- area-bdr-rtr-count
+ area-range ip-prefix-mask (ipv4-prefix | ipv6-prefix)
  + advertise boolean
  - as-bdr-rtr-count
+ blackhole-aggregate boolean
+ export-policy reference

```



```

- full-spf-runs
+ interface interface-name string
+ admin-state keyword
+ advertise-router-capability boolean
+ advertise-subnet boolean
+ authentication
+ keychain reference
- bad-packets
- auth-failures
- bad-area
- bad-auth-type
- bad-checksum
- bad-dead-interval
- bad-dest-address
- bad-hello-interval
- bad-length
- bad-neighbors
- bad-network
- bad-options
- bad-packet-type
- bad-version
- bad-virtual-link
- bdr-id
+ dead-interval number
- dr-id
- events
+ failure-detection
+ enable-bfd boolean
+ hello-interval number
+ interface-type keyword
- last-enabled-time string
- last-event-time string
+ ldp-synchronization
+ disable
- duration number
+ end-of-lib boolean
+ hold-down-timer number
- sync-state keyword
- link-lsa-cksum-sum string
- link-lsa-count
- local-ip-address (ipv4-address | ipv6-address)
+ lsa-filter-out keyword
- lsa-totals
- e-link-lsa
- link-lsa
- link-opaque-lsa
- router-info-lsa
+ metric number
+ mtu number
- neighbor router-id
- address (ipv4-address-with-zone | ipv6-address-with-zone)
- adjacency-state identityref
- backup-designated-router
- dead-time number
- designated-router
- last-established-time string
- last-event-time string
- last-restart-time string
- optional-capabilities
- priority number
- restart-helper-age number
- restart-helper-exit-rc keyword
- restart-helper-status keyword
- restart-reason (number | keyword)

```

```

- retransmission-queue-length number
- state-changes number
- statistics
  - bad-mtu
  - bad-nbr-states
  - bad-packets
  - bad-seq-nums
  - duplicates
  - events
  - lsa-install-failed
  - lsa-not-in-lsdb
  - num-restarts
  - option-mismatches
- up-time number
- neighbor-count
- oper-state keyword
- packets
  - discarded
  - retransmits
  - rx-db-description
  - rx-hello
  - rx-ls-ack
  - rx-ls-request
  - rx-ls-update
  - rx-total
  - tx-db-description
  - tx-hello
  - tx-ls-ack
  - tx-ls-request
  - tx-ls-update
  - tx-total
+ passive boolean
+ priority number
+ retransmit-interval number
+ trace-options
  + trace
    + adjacencies
    + interfaces
    + packet
      + detail
      + modifier keyword
      + type keyword
+ transit-delay number
- last-spf-run-time string
- lsa-filter-totals
  - export-filtered
  - import-filtered
- lsa-totals
  - area-opaque-lsa
  - asbr-summary-lsa
  - e-inter-area-prefix-lsa
  - e-inter-area-router-lsa
  - e-intra-area-prefix-lsa
  - e-network-lsa
  - e-nssa-lsa
  - e-router-lsa
  - inter-area-prefix-lsa
  - inter-area-router-lsa
  - intra-area-prefix-lsa
  - network-lsa
  - network-summary-lsa
  - nssa-lsa
  - router-info-lsa
  - router-lsa

```

```

- total
- total-lsa-cksum-sum string
- unknown-lsa
+ nssa
+ area-range ip-prefix-mask (ipv4-prefix | ipv6-prefix)
+ advertise boolean
+ originate-default-route
+ adjacency-check boolean
+ type-nssa boolean
+ redistribute-external boolean
+ summaries boolean
+ stub
+ default-metric number
+ summaries boolean
- area-border-router boolean
- as-border-router boolean
+ asbr
+ trace-path (number | keyword)
- backbone-router boolean
+ export-limit
+ log-percent number
+ number number
+ export-policy reference
- extern-lsa-cksum-sum string
- extern-lsa-count
+ external-db-overflow
+ interval number
+ limit number
+ external-preference number
+ graceful-restart
+ helper-mode boolean
+ strict-lsa-checking boolean
+ instance-id number
- last-disabled-reason string
- last-enabled-time string
- last-overflow-entered-time string
- last-overflow-exit-time string
- last-overload-enter-code keyword
- last-overload-entered-time string
- last-overload-exit-code keyword
- last-overload-exit-time string
+ ldp-synchronization
+ end-of-lib boolean
+ hold-down-timer number
- lsa-totals
- as-external-lsa
- as-opaque-lsa
- e-as-external-lsa
- router-info-lsa
+ max-ecmp-paths number
- new-lsas-originated
- new-lsas-received
- opaque-lsa-support boolean
- oper-state keyword
- overflow boolean
+ overload
+ active boolean
+ overload-include-ext-1 boolean
+ overload-include-ext-2 boolean
+ overload-include-stub boolean
+ overload-on-boot
+ timeout number
+ rtr-adv-lsa-limit
+ log-only boolean

```

```

    + max-lsa-count number
    + overload-timeout number
    + warning-threshold number
- overload-rem-interval number
- overload-state keyword
- ovld-lsa-limit-rem-interval number
+ preference number
+ reference-bandwidth number
+ router-id
- routes-submitted
- spf
  - avg-spf-run-interval number
  - ext-spf-runs
  - full-spf-runs
  - incremental-ext-spf-runs
  - incremental-inter-spf-runs
  - last-ext-spf
    - interval number
    - run-time string
  - last-full-spf
    - extern-spf-time number
    - inter-spf-time number
    - intra-spf-time number
    - rtm-update-time number
    - run-time string
    - total-time number
  - max-spf-run-interval number
  - min-spf-run-interval number
  - spf-attempts-failed
+ timers
+ incremental-spf-wait number
+ lsa-accumulate number
+ lsa-arrival number
+ lsa-generate
  + lsa-initial-wait number
  + lsa-second-wait number
  + max-lsa-wait number
+ redistribute-delay number
+ spf-wait
  + spf-initial-wait number
  + spf-max-wait number
  + spf-second-wait number
- total-exported-routes
+ trace-options
+ trace
  + adjacencies
  + graceful-restart
  + interfaces
  + lsd
    + link-state-id string
    + router-id string
    + type keyword
  + misc
  + packet
    + detail
    + modifier keyword
    + type keyword
  + routes
    + dest-address (ipv4-address | ipv6-address)
    + spf
      + dest-address (ipv4-address | ipv6-address)
  + version identityref
+ pcep
+ pcc

```

```

+ admin-state keyword
- allow-negotiation boolean
- capabilities keyword
- connect-timer number
+ dead-timer number
- keep-wait-timer number
+ keepalive number
- lsp-update pce-id number
  - association-detail association-index number
    - association-id number
    - association-source (ipv4-address-unicast | ipv6-address-unicast-without-
local)
      - association-type keyword
      - disjointness-reference boolean
      - disjointness-type keyword
      - diversity-type keyword
    - delegated boolean
    - delegated-peer-address (ipv4-address-unicast | ipv6-address-unicast-without-
local)
      - destination-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
      - extended-tunnel-id (ipv4-address-unicast | ipv6-address-unicast)
      - lsp-id number
      - lsp-type keyword
      - name string
      - oper-state keyword
      - path-detail path-type keyword
        - error keyword
        - exclude-any number
        - explicit-route-objects route-object-index number
          - as-number number
          - local-interface-id number
          - local-interface-name string
          - local-prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - remote-interface-id number
          - remote-prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - router-id (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - sid-label number
          - sid-type keyword
        - holding-priority number
        - hop-count number
        - igp-metric number
        - include-all number
        - include-any number
        - lsp-bandwidth number
        - record-route-objects route-object-index number
          - as-number number
          - local-interface-id number
          - local-interface-name string
          - local-prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - remote-interface-id number
          - remote-prefix (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - router-id (ipv4-address-unicast | ipv6-address-unicast-without-local)
          - sid-label number
          - sid-type keyword
        - setup-priority number
        - srp-id number
        - te-metric number
      - source-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
      - state keyword
      - tunnel-id number
    - max-sessions number
    - max-unknown-requests number

```

```

- open-wait-timer number
- oper-state keyword
- path-request request-id number
  - bidirectional boolean
  - destination-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
  - exclude-any number
  - extended-profiles number
  - extended-tunnel-id (ipv4-address-unicast | ipv6-address-unicast)
  - holding-priority number
  - hop-count number
  - igp-metric number
  - include-all number
  - include-any number
  - local-protection-desired boolean
  - loose-path-acceptable boolean
  - lsp-bandwidth number
  - lsp-id number
  - lsp-name string
  - lsp-type keyword
  - max-lsr-labels number
  - message-state keyword
  - metric-bound keyword
  - metric-compute keyword
  - msg-priority number
  - profiles number
  - reoptimization boolean
  - setup-priority number
  - source-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
  - sync-vector-id number
  - te-metric number
  - tunnel-id number
+ peer ip-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ admin-state keyword
- capabilities keyword
- is-overloaded boolean
+ local-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ network-instance reference
- oper-dead-timer number
- oper-keepalive number
- oper-local-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
- oper-state keyword
+ preference number
- session-established-time string
- speaker-id string
- statistics
  - num-keepalive-rcvd number
  - num-keepalive-sent number
  - num-pcerr-rcvd number
  - num-pcerr-sent number
  - num-pcinit-rcvd number
  - num-pcinit-sent number
  - num-pcntf-rcvd number
  - num-pcntf-sent number
  - num-pcrep-rcvd number
  - num-pcrep-sent number
  - num-pcreq-rcvd number
  - num-pcreq-sent number
  - num-pcrpt-rcvd number
  - num-pcrpt-sent number
  - num-pcupd-rcvd number
  - num-pcupd-sent number
  - num-req-rcvd number
  - num-req-sent number
  - num-rpt-rcvd number

```

```

- num-rpt-sent number
- num-session-setup-fail number
- num-session-setup-ok number
- sync-state keyword
+ redelegation-timer number
+ report-path-constraints boolean
- request-timer number
+ state-timer
+ timer number
+ timer-action keyword
- sync-timer number
+ unknown-message-rate number
+ pim
+ admin-state keyword
- database
- group group (ipv4-address | ipv6-address) source (ipv4-address | ipv6-address)
- advertising-router (ipv4-address | ipv6-address)
- current-forwarding-rate number
- immediate-outgoing-interface-count number
- inherited-outgoing-interface-count number
- inherited-rpt-outgoing-interface-count number
- join-or-prune-interface-count number
- keepalive-timer number
- local-rx-exclude-interface-count number
- local-rx-include-interface-count number
- lost-assert-interface-count number
- multicast-rib-nh-address (ipv4-address-with-zone | ipv6-address-with-zone)
- multicast-rib-source-flags bits
- outgoing-interface name string
- flags bits
- register-from-anycast-rp boolean
- register-state keyword
- register-stop-timer number
- resolved-by keyword
- rp-address (ipv4-address | ipv6-address)
- rpf-neighbor-address (ipv4-address | ipv6-address)
- rpf-neighbor-interface-name string
- rpt-rpf-neighbor-address (ipv4-address | ipv6-address)
- s-g-rpt-prune-interface-count number
- sg-state keyword
- source-flags bits
- source-type keyword
- spt-switchover-threshold number
- statistics
- discarded-packets number
- forwarded-octets number
- forwarded-packets number
- rpf-mismatches number
- up-time string
- upstream-jp-state keyword
- upstream-jp-timer number
- upstream-rpt-jp-state keyword
- upstream-rpt-override-timer number
+ ecmp-balance boolean
+ ecmp-balance-hold number
+ ecmp-hashing
+ rebalance boolean
+ import-policies
+ join-policy reference
+ register-policy reference
+ interface interface-name string
+ admin-state keyword
+ assert-interval number
- database

```

```

- group group (ipv4-address | ipv6-address) source (ipv4-address | ipv6-address)
- assert-metric number
- assert-metric-preference number
- assert-rpt-bit boolean
- assert-state keyword
- assert-timer number
- assert-winner-address (ipv4-address | ipv6-address)
- assert-winner-metric number
- assert-winner-metric-preference number
- assert-winner-rpt-bit boolean
- jp-rpt-pending-timer number
- jp-rpt-state keyword
- jp-rpt-timer number
- jp-state keyword
- jp-timer number
- prune-pending-timer number
- rp-address (ipv4-address | ipv6-address)
- source-type keyword
- up-time string
+ dr-priority number
+ hello-interval number
+ hello-multiplier number
+ improved-assert boolean
- ipv4
- dr-address string
- oper-priority number
- oper-state keyword
- statistics
- join-policy-drops number
- received
- assert-errors number
- assert-messages number
- bad-checksum-discard number
- bad-encodings number
- bad-version-discard number
- candidate-rp-adv-no-router-alert number
- hello-messages number
- hellos-dropped number
- invalid-join-prune-messages number
- invalid-register-messages number
- join-prune-errors number
- join-prune-messages number
- neighbor-unknown number
- null-register-messages number
- packets number
- register-errors number
- register-messages number
- register-stop-errors number
- register-stop-messages number
- unknown-pdu-type number
- register-policy-drops number
- sg-count number
- star-g-count number
- star-star-rp-count number
- transmitted
- assert-messages number
- hello-messages number
- join-prune-messages number
- packets number
- register-stop-errors number
- register-stop-messages number
+ ipv4-admin-state keyword
- ipv6
- dr-address string

```



```

- oper-priority number
- oper-state keyword
- statistics
  - join-policy-drops number
  - received
    - assert-errors number
    - assert-messages number
    - bad-checksum-discard number
    - bad-encodings number
    - bad-version-discard number
    - candidate-rp-adv-no-router-alert number
    - hello-messages number
    - hellos-dropped number
    - invalid-join-prune-messages number
    - invalid-register-messages number
    - join-prune-errors number
    - join-prune-messages number
    - neighbor-unknown number
    - null-register-messages number
    - packets number
    - register-errors number
    - register-messages number
    - register-stop-errors number
    - register-stop-messages number
    - unknown-pdu-type number
  - register-policy-drops number
  - sg-count number
  - star-g-count number
  - star-star-rp-count number
  - transmitted
    - assert-messages number
    - hello-messages number
    - join-prune-messages number
    - packets number
    - register-stop-errors number
    - register-stop-messages number
+ ipv6-admin-state keyword
+ maximum-number-groups number
- neighbors
  - neighbor address (ipv4-address-with-zone | ipv6-address-with-zone)
    - dr-priority number
    - dr-priority-present boolean
    - expiry-time number
    - generated-id number
    - hold-time number
    - join-attribute-support boolean
    - lan-delay number
    - lan-delay-present boolean
    - override-interval number
    - tracking-support boolean
    - up-time string
  - oper-state keyword
+ ipv4
  + admin-state keyword
  - oper-state keyword
  - statistics
    - forwarded-candidate-rp-advertisement-drops number
    - forwarded-candidate-rp-advertisements number
    - received
      - candidate-rp-advertisement-drops number
      - candidate-rp-advertisement-messages number
      - control-pdu-interface-drops number
    - sg-count number
    - star-g-count number

```

```

- star-star-rp-count number
- transmitted
- candidate-rp-advertisement-errors number
- candidate-rp-advertisement-messages number
- null-register-messages number
- register-errors number
- register-messages number
- register-ttl-drops number
+ ipv6
+ admin-state keyword
- oper-state keyword
- statistics
- forwarded-candidate-rp-advertisement-drops number
- forwarded-candidate-rp-advertisements number
- received
- candidate-rp-advertisement-drops number
- candidate-rp-advertisement-messages number
- control-pdu-interface-drops number
- sg-count number
- star-g-count number
- star-star-rp-count number
- transmitted
- candidate-rp-advertisement-errors number
- candidate-rp-advertisement-messages number
- null-register-messages number
- register-errors number
- register-messages number
- register-ttl-drops number
- multicast-ecmp-last-rebalance-time string
- multicast-ecmp-next-balance-time number
- multicast-ecmp-rebalance-inprogress boolean
- multicast-ecmp-rebalance-type keyword
- oper-state keyword
+ rendezvous-points
+ static
+ rendezvous-point address (ipv4-address | ipv6-address)
+ group prefix (ipv4-prefix | ipv6-prefix)
+ spt-switchover
+ group prefix (ipv4-prefix | ipv6-prefix)
+ threshold (number | keyword)
+ ssm
+ ssm-ranges
+ group-range ip-prefix (ipv4-prefix | ipv6-prefix)
+ trace-options
+ trace
+ events
+ all-event-types
+ detail boolean
+ group-address (ipv4-address | ipv6-address)
+ interface-name reference
+ source-address (ipv4-address | ipv6-address)
+ event-types
+ adjacency
+ assert
+ detail boolean
+ group-address (ipv4-address | ipv6-address)
+ source-address (ipv4-address | ipv6-address)
+ data-exception
+ detail boolean
+ group-address (ipv4-address | ipv6-address)
+ source-address (ipv4-address | ipv6-address)
+ database
+ detail boolean
+ group-address (ipv4-address | ipv6-address)

```

```

+   + source-address (ipv4-address | ipv6-address)
+   + interface
+     + detail boolean
+     + interface-name reference
+   + join-prune
+     + detail boolean
+     + group-address (ipv4-address | ipv6-address)
+     + source-address (ipv4-address | ipv6-address)
+   + messaging
+   + pim-route-table
+     + detail boolean
+   + register
+     + detail boolean
+     + group-address (ipv4-address | ipv6-address)
+     + source-address (ipv4-address | ipv6-address)
+ packet
+   + all-packet-types
+     + all-interfaces
+     + egress boolean
+     + ingress boolean
+     + interface-name reference
+     + ipv4 boolean
+     + ipv6 boolean
+   + packet-types
+     + assert
+       + all-interfaces
+       + egress boolean
+       + ingress boolean
+       + interface-name reference
+       + ipv4 boolean
+       + ipv6 boolean
+     + hello
+       + all-interfaces
+       + egress boolean
+       + ingress boolean
+       + interface-name reference
+       + ipv4 boolean
+       + ipv6 boolean
+     + join-prune
+       + all-interfaces
+       + egress boolean
+       + ingress boolean
+       + interface-name reference
+       + ipv4 boolean
+       + ipv6 boolean
+     + register
+       + all-interfaces
+       + egress boolean
+       + ingress boolean
+       + interface-name reference
+       + ipv4 boolean
+       + ipv6 boolean
+     + register-stop
+       + all-interfaces
+       + egress boolean
+       + ingress boolean
+       + interface-name reference
+       + ipv4 boolean
+       + ipv6 boolean
+   + ptp
+     - oper-state keyword
+     + peer-limit number
+     + source-address-ipv4 string
+     + source-address-ipv6 string

```

```

- route-table
  - ipv4-unicast
    - route ipv4-prefix string route-type identityref route-owner string id number origin-
      network-instance reference
    - active boolean
    - fib-programming
      - last-failed-complexes string
      - last-failed-operation-type keyword
      - last-successful-operation-timestamp string
      - last-successful-operation-type keyword
      - pending-operation-type keyword
      - suppressed boolean
    - gribi-metadata binary
    - internal-tags string
    - last-app-update string
    - leakable boolean
    - metric number
    - next-hop-group reference
    - next-hop-group-network-instance reference
    - preference number
    - resilient-hash boolean
    - target-network-instances reference
  - route-summary
    - route-type ip-route-type-name identityref
    - active-routes number
  - statistics
    - active-routes number
    - active-routes-with-ecmp number
    - fib-failed-routes number
    - resilient-hash-routes number
    - total-routes number
  - ipv6-unicast
    - route ipv6-prefix string route-type identityref route-owner string id number origin-
      network-instance reference
    - active boolean
    - fib-programming
      - last-failed-complexes string
      - last-failed-operation-type keyword
      - last-successful-operation-timestamp string
      - last-successful-operation-type keyword
      - pending-operation-type keyword
      - suppressed boolean
    - gribi-metadata binary
    - internal-tags string
    - last-app-update string
    - leakable boolean
    - metric number
    - next-hop-group reference
    - next-hop-group-network-instance reference
    - preference number
    - resilient-hash boolean
    - target-network-instances reference
  - route-summary
    - route-type ip-route-type-name identityref
    - active-routes number
  - statistics
    - active-routes number
    - active-routes-with-ecmp number
    - fib-failed-routes number
    - resilient-hash-routes number
    - total-routes number
  - mpls
    - label-entry label-value number
    - entry-type identityref

```

```

- last-app-update string
- next-bgp-instance reference
- next-ethernet-segment reference
- next-hop-group reference
- next-network-instance reference
- operation keyword
- statistics
  - active-entries number
- next-hop index number
- counters
  - octets-forwarded number
  - packets-forwarded number
  - resource-allocation-failed boolean
- decapsulate-header keyword
- encapsulate-header keyword
- ip-address (ipv4-address | ipv6-address)
- ip-in-ip
  - dst-ip (ipv4-address | ipv6-address)
  - src-ip (ipv4-address | ipv6-address)
- mac-address string
- mpls
  - entropy-label-transmit boolean
  - pushed-mpls-label-stack (number | keyword)
- network-instance reference
- programmed-index number
- resolving-route
  - ip-prefix (ipv4-prefix | ipv6-prefix)
  - next-hop-group reference
  - route-owner string
  - route-type identityref
- resolving-tunnel
  - ip-prefix (ipv4-prefix | ipv6-prefix)
  - next-hop-group reference
  - tunnel-id number
  - tunnel-owner string
  - tunnel-type identityref
- subinterface reference
- type identityref
- vxlan
  - destination-mac string
  - source-mac string
  - vni number
- next-hop-group index number
- backup-next-hop id number
  - next-hop reference
  - resolved keyword
- backup-next-hop-group reference
- fib-programming
  - last-failed-complexes string
  - last-failed-operation-type keyword
  - last-successful-operation-timestamp string
  - last-successful-operation-type keyword
  - pending-operation-type keyword
  - suppressed boolean
- group-name-alias string
- next-hop id number
  - next-hop reference
  - resolved keyword
  - weight number
- programmed-index number
+ router-id string
+ segment-routing
+ mpls
+ global-block

```

```

+ label-range reference
- label-range-status keyword
+ local-prefix-sid prefix-sid-index number
+ interface string
+ ipv4-label-index number
+ ipv6-label-index number
+ node-sid boolean
- sid-database
  - prefix-sid prefix (ipv4-prefix | ipv6-prefix) sid-label-
value number protocol keyword protocol-instance number protocol-multi-
topology number algorithm number
  - active boolean
  - prefix-conflict boolean
  - sid-conflict boolean
+ static-routes
+ admin-state keyword
+ route prefix (ipv4-prefix | ipv6-prefix)
+ admin-state keyword
- installed boolean
+ metric number
+ next-hop-group reference
+ preference number
+ tag-set reference
+ tag-value (number | hex-string)
- system-ipv4-address
- oper-down-reason keyword
- oper-state keyword
- system-ipv6-address
- oper-down-reason keyword
- oper-state keyword
- tcp
- connection local-address (ipv4-address | ipv6-address) local-port number remote-
address (ipv4-address | ipv6-address) remote-port number
- process-id number
- session-state keyword
- listening-application local-address (ipv4-address | ipv6-address) local-port number
- process-id number
- statistics
- active-opens number
- attempt-fails number
- established-resets number
- in-checksum-errors number
- in-error-segments number
- in-segments number
- out-rst-segments number
- out-segments number
- passive-opens number
- retransmitted-segments number
+ traffic-engineering
+ admin-groups
+ group name string
+ bit-position number
+ autonomous-system number
+ interface interface-name string
+ admin-group reference
+ interface-ref
+ interface reference
+ subinterface reference
+ srlg-membership reference
+ te-metric number
+ ipv4-te-router-id string
+ ipv6-te-router-id string
+ shared-risk-link-groups
+ group name string

```

```

    + value number
+ traffic-engineering-policies
+ binding-sid
+ static-label-block reference
- static-label-block-status keyword
+ explicit-paths
+ path explicit-path-name string
+ hop index number
+ ip
+ hop-type keyword
+ ip-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ mpls-label number
+ policy policy-name string
+ admin-state keyword
+ binding-sid
+ mpls-label number
+ endpoint (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ entropy-label
+ transmit keyword
+ head-end (ipv4-address-excluding-all-zero | keyword)
- last-oper-state-change string
+ maintenance
+ maintenance-policy reference
+ metric number
- oper-down-reason identityref
- oper-state keyword
- oper-state-change-count number
+ policy-type keyword
+ re-optimization-timer (number | keyword)
+ retry-timer number
+ segment-list segment-list-index number
+ admin-state keyword
+ dynamic
+ path-algorithm keyword
+ te-constraints
+ delay-metric-limit (keyword | number)
+ exclude-hop (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ hop-limit number
+ label-stack-reduction boolean
+ local-sr-protection keyword
+ metric-type keyword
+ secondary-srlg boolean
+ segment-depth
+ segment-limit number
- entropy-label-transmit boolean
+ explicit-path reference
- failed-reason identityref
- forwarding-state keyword
- last-oper-state-change string
- oper-state keyword
- oper-state-change-count number
+ pce-control boolean
+ pce-report boolean
+ priority
+ hold-priority number
+ setup-priority number
+ segment-list-preference number
+ segment-list-type keyword
+ tag-set reference
- policy-database
- active-te-policies number
- sr-uncolored
- policy policy-name string protocol-origin keyword
- active-segment-list-index number

```

```

- binding-sid
  - mpls-label number
- created-time string
- endpoint (ipv4-address-unicast | ipv6-address-unicast-without-local)
- head-end (ipv4-address-unicast | ipv6-address-unicast-without-local)
- last-oper-state-change string
- maintenance
  - maintenance-policy string
- metric number
- oper-down-reason identityref
- oper-state keyword
- oper-state-change-count number
- policy-type keyword
- segment-list segment-list-index number
  - bfd
    - bfd-state keyword
    - bfd-wait-for-up-expiry string
    - bfd-wait-for-up-timer number
    - hold-down-timer number
    - hold-down-timer-expiry string
  - computed-segments
    - segment segment-index number
      - hop-type keyword
      - ip-address (ipv4-address-unicast | ipv6-address-unicast-without-local)
      - is-loose boolean
      - router-id (ipv4-address | ipv6-address)
      - sid-type keyword
      - sid-value
        - mpls-label number
        - unnumbered-if-id number
    - delay-metric number
  - dynamic
    - path-algorithm keyword
    - te-constraints
      - delay-metric-limit (keyword | number)
      - exclude-hop (ipv4-address-unicast | ipv6-address-unicast-without-local)
      - hop-limit number
      - label-stack-reduction boolean
      - local-sr-protection keyword
      - metric-type keyword
      - secondary-srlg boolean
      - segment-depth
        - segment-limit number
    - entropy-label-transmit boolean
  - explicit-path string
  - failed-reason identityref
  - forwarding-state keyword
  - igp-metric number
  - last-oper-state-change string
  - last-pce-update
    - failure-reason identityref
    - state keyword
    - time string
    - update-id number
  - last-reoptimization-attempt string
  - last-retry-attempt string
  - lsp-id number
  - mbb
    - in-progress-mbb
      - start-time string
      - type keyword
    - last-mbb
      - end-time string
      - failed-reason identityref

```



```

    - state keyword
    - type keyword
  - metric number
  - next-reoptimization-attempt string
  - next-retry-attempt string
  - oper-state keyword
  - oper-state-change-count number
  - path-computation-requests number
  - pce-control boolean
  - pce-report boolean
  - retry-attempts number
  - revert-timer number
  - revert-timer-expiry string
  - segment-list-preference number
  - segment-list-type keyword
  - te-metric number
  - segment-list-count number
  - tag-set reference
  - tunnel-id number
- total-te-policies number
- tunnel-table
- ipv4
  - statistics
  - active-tunnels number
  - inactive-tunnels number
  - total-tunnels number
  - tunnel ipv4-prefix string type identityref owner string id number
  - encapsulation-type keyword
  - fib-programming
  - not-programmed-reason keyword
  - status keyword
  - internal-tags string
  - ip-in-ip
  - destination-address (ipv4-address | ipv6-address)
  - source-address (ipv4-address | ipv6-address)
  - last-app-update string
  - metric number
  - next-hop-group reference
  - preference number
  - vxlan
  - destination-address (ipv4-address | ipv6-address)
  - destination-udp-port number
  - source-address (ipv4-address | ipv6-address)
  - time-to-live number
  - tunnel-summary
  - tunnel-type type identityref
  - active-tunnels number
  - inactive-tunnels number
  - total-tunnels number
- ipv6
  - statistics
  - active-tunnels number
  - inactive-tunnels number
  - total-tunnels number
  - tunnel ipv6-prefix string type identityref owner string id number
  - encapsulation-type keyword
  - fib-programming
  - not-programmed-reason keyword
  - status keyword
  - internal-tags string
  - ip-in-ip
  - destination-address (ipv4-address | ipv6-address)
  - source-address (ipv4-address | ipv6-address)
  - last-app-update string

```

```
- metric number
- next-hop-group reference
- preference number
- vxlan
  - destination-address (ipv4-address | ipv6-address)
  - destination-udp-port number
  - source-address (ipv4-address | ipv6-address)
  - time-to-live number
- tunnel-summary
  - tunnel-type type identityref
  - active-tunnels number
  - inactive-tunnels number
  - total-tunnels number
+ type identityref
- udp
  - listening-application local-address (ipv4-address | ipv6-address) local-port number
  - process-id number
  - statistics
    - ignored-multicast-packets number
    - in-checksum-errors number
    - in-error-packets number
    - in-no-open-ports-packets number
    - in-packets number
    - out-packets number
    - receive-buffer-errors number
    - send-buffer-errors number
+ vxlan-interface name string
  - oper-down-reason keyword
  - oper-state keyword
```

## 6.1 network-instance Descriptions

### network-instance *name string*

<b>Description</b>	Network instances configured on the local system
<b>Context</b>	<a href="#">network-instance name string</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	A unique name identifying the network instance
<b>Context</b>	<a href="#">network-instance name string</a>
<b>String Length</b>	1 to 247
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### admin-state *keyword*

<b>Description</b>	This leaf contains the configured, desired state of the network instance.
<b>Context</b>	<a href="#">network-instance name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### afts

<b>Description</b>	The abstract forwarding tables (AFTs) that are associated with the network instance
<b>Context</b>	<a href="#">network-instance name string afts</a>
<b>Tree</b>	<a href="#">afts</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ipv4-unicast

<b>Description</b>	The abstract forwarding table for IPv4 unicast Entries within this table are uniquely keyed on the IPv4 unicast destination prefix which is matched by ingress packets. The data set represented by the IPv4 Unicast AFT is the set of entries from the IPv4 unicast RIB that have been selected for installation into the FIB of the device exporting the data structure.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ipv4-entry [prefix](#) *string*

<b>Description</b>	List of the IPv4 unicast entries within the abstract forwarding table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast</a> <a href="#">ipv4-entry</a> <a href="#">prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-entry</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## [prefix](#) *string*

<b>Description</b>	The IPv4 destination prefix that should be matched to utilise the AFT entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast</a> <a href="#">ipv4-entry</a> <a href="#">prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## entry-metadata *binary*

<b>Description</b>	Metadata persistently stored with the entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast</a> <a href="#">ipv4-entry</a> <a href="#">prefix</a> <i>string</i> <a href="#">entry-metadata</a> <i>binary</i>
<b>Tree</b>	<a href="#">entry-metadata</a>

<b>String Length</b>	0 to 8
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **next-hop-group** *reference*

<b>Description</b>	A reference to the next-hop-group that is used for the entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast ipv4-entry prefix</a> <i>string</i> <a href="#">next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **next-hop-group-network-instance** *reference*

<b>Description</b>	The network instance associated with the next-hop-group If unspecified, the next hop group is in the local network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast ipv4-entry prefix</a> <i>string</i> <a href="#">next-hop-group-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **origin-network-instance** *reference*

<b>Description</b>	The network-instance from which the IPv4 entry was learned if it was leaked from another network-instance If unspecified, the IPv4 entry was not leaked
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast ipv4-entry prefix</a> <i>string</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">origin-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**origin-protocol** *identityref*

<b>Description</b>	The protocol that submitted the route for the IPv4 prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast ipv4-entry prefix</a> <i>string</i> <a href="#">origin-protocol</a> <i>identityref</i>
<b>Tree</b>	<a href="#">origin-protocol</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• aggregate Locally configured aggregate route</li> <li>• arp-nd IP route added by ARP ND.</li> <li>• bgp Border Gateway Protocol version 4</li> <li>• bgp-label Border Gateway Protocol labeled routes</li> <li>• bgp-evpn BGP Ethernet VPN (EVPN)</li> <li>• bgp-ipvpn BGP IP VPN</li> <li>• dhcp IP (default) route added by DHCP.</li> <li>• gribi A gRIBI route</li> <li>• host A host route</li> <li>• isis IS-IS</li> <li>• local A directly connected route</li> <li>• linux IP route added by the linux kernel.</li> <li>• ndk1 Route added by an agent application using the NDK</li> <li>• ndk2 Route added by an agent application using the NDK</li> <li>• ospfv2 OSPFv2</li> </ul>

- ospfv3  
OSPFv3
- static  
Locally configured static route

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### state-synced *boolean*

<b>Description</b>	State synced signal indicating consistent device snapshot of IPv4 unicast AFT entries. Before setting this flag to true next-hop-groups and next-hops AFT entries, associated with ipv4-unicast AFT entries, are expected to be consistent with device snapshot.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv4-unicast state-synced</a> <i>boolean</i>
<b>Tree</b>	<a href="#">state-synced</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ipv6-unicast

<b>Description</b>	The abstract forwarding table for IPv6 unicast Entries within this table are uniquely keyed on the IPv6 unicast destination prefix which is matched by ingress packets. The data set represented by the IPv6 Unicast AFT is the set of entries from the IPv6 unicast RIB that have been selected for installation into the FIB of the device exporting the data structure.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ipv6-entry *prefix string*

<b>Description</b>	List of the IPv6 unicast entries within the abstract forwarding table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv6-unicast ipv6-entry prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-entry</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix string**

<b>Description</b>	The IPv6 destination prefix that should be matched to utilise the AFT entry
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">afts ipv6-unicast ipv6-entry prefix string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**entry-metadata binary**

<b>Description</b>	Metadata persistently stored with the entry
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">afts ipv6-unicast ipv6-entry prefix string</a> <a href="#">entry-metadata binary</a>
<b>Tree</b>	<a href="#">entry-metadata</a>
<b>String Length</b>	0 to 8
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group reference**

<b>Description</b>	A reference to the next-hop-group that is used for the entry
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">afts ipv6-unicast ipv6-entry prefix string</a> <a href="#">next-hop-group reference</a>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name string</a> <a href="#">route-table next-hop-group index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group-network-instance reference**

<b>Description</b>	The network instance associated with the next-hop-group If unspecified, the next hop group is in the local network instance.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">afts ipv6-unicast ipv6-entry prefix string</a> <a href="#">next-hop-group-network-instance reference</a>
<b>Tree</b>	<a href="#">next-hop-group-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **origin-network-instance** *reference*

**Description** The network-instance from which the IPv6 entry was learned if it was leaked from another network-instance  
If unspecified, the IPv6 entry was not leaked

**Context** [network-instance name](#) *string* [afts ipv6-unicast ipv6-entry prefix](#) *string* [origin-network-instance](#) *reference*

**Tree** [origin-network-instance](#)

**Reference** [network-instance name](#) *string*

**Configurable** False

**Platforms** Supported on all platforms

### **origin-protocol** *identityref*

**Description** The protocol that submitted the route for the IPv6 prefix

**Context** [network-instance name](#) *string* [afts ipv6-unicast ipv6-entry prefix](#) *string* [origin-protocol](#) *identityref*

**Tree** [origin-protocol](#)

**Options**

- aggregate  
Locally configured aggregate route
- arp-nd  
IP route added by ARP ND.
- bgp  
Border Gateway Protocol version 4
- bgp-label  
Border Gateway Protocol labeled routes
- bgp-evpn  
BGP Ethernet VPN (EVPN)
- bgp-ipvpn  
BGP IP VPN
- dhcp  
IP (default) route added by DHCP.
- gribi  
A gRIBI route
- host

- A host route
  - isis
    - IS-IS
  - local
    - A directly connected route
  - linux
    - IP route added by the linux kernel.
  - ndk1
    - Route added by an agent application using the NDK
  - ndk2
    - Route added by an agent application using the NDK
  - ospfv2
    - OSPFv2
  - ospfv3
    - OSPFv3
  - static
    - Locally configured static route

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **state-synced** *boolean*

<b>Description</b>	State synced signal indicating consistent device snapshot of IPv6 unicast AFT entries. Before setting this flag to true next-hop-groups and next-hops AFT entries, associated with ipv6-unicast AFT entries, are expected to be consistent with device snapshot.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts ipv6-unicast state-synced</a> <i>boolean</i>
<b>Tree</b>	<a href="#">state-synced</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **next-hop-group** *id number*

<b>Description</b>	An individual set of next-hops grouped into a common group Each entry within an abstract forwarding table points to a next-hop-group. Traffic is forwarded to the next-hops in the next-hop-group according to the weights specified.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	A unique identifier for the next-hop-group This index is not expected to be consistent across reboots, or reprogramming of the next-hop-group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-next-hop-group** *reference*

<b>Description</b>	The backup next-hop-group for the current group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i> <a href="#">backup-next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">backup-next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop** [index](#) *reference*

<b>Description</b>	An individual next-hop within the next-hop-group Each next-hop is a reference to an entry within the next-hop list.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i> <a href="#">next-hop index</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**index reference**

<b>Description</b>	A reference to the identifier for the next-hop to which the entry in the next-hop group corresponds
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i> <a href="#">next-hop index reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**weight number**

<b>Description</b>	The weight applied to the next-hop within the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i> <a href="#">next-hop index reference</a> <a href="#">weight number</a>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**programmed-id number**

<b>Description</b>	The ID of the next-hop group as provided by the original programming mechanism (for example gRIBI)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">afts next-hop-group id</a> <i>number</i> <a href="#">programmed-id number</a>
<b>Tree</b>	<a href="#">programmed-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**aggregate-routes**

<b>Description</b>	Enable the aggregate-routes context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes</a>
<b>Tree</b>	<a href="#">aggregate-routes</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the route list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	16384

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable this aggregate route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**aggregator**

<b>Description</b>	Enter the aggregator context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator</a>
<b>Tree</b>	<a href="#">aggregator</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**address** *string*

<b>Description</b>	Specifies the aggregator's IP address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**as-number** *number*

<b>Description</b>	Specifies the aggregator's ASN
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator as-number</a> <i>number</i>
<b>Tree</b>	<a href="#">as-number</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**communities**

<b>Description</b>	Enter the communities context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">communities</a>
<b>Tree</b>	<a href="#">communities</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**add** (*bgp-std-community-type* | *identityref* | *bgp-large-community-type*)

<b>Description</b>	Enter the add context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">communities add</a> ( <i>bgp-std-community-type</i>   <i>identityref</i>   <i>bgp-large-community-type</i> )

<b>Tree</b>	<a href="#">add</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>no-export</b> Do not export NLRI received carrying this community outside the bounds of this autonomous system, or this confederation if the local autonomous system is a confederation member AS. This community has a value of 0xFFFFFFFF01.</li> <li>• <b>no-advertise</b> All NLRI received carrying this community must not be advertised to other BGP peers. This community has a value of 0xFFFFFFFF02.</li> <li>• <b>no-export-subconfed</b> All NLRI received carrying this community must not be advertised to external BGP peers - including over confederation sub-AS boundaries. This community has a value of 0xFFFFFFFF03.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	12

### **generate-icmp** *boolean*

<b>Description</b>	When set to true the router generates ICMP unreachable messages for packets matching the aggregate route (and not a more specific route).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">generate-icmp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate-icmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **installed** *boolean*

<b>Description</b>	If set to true, this indicates that the aggregate route was installed into the datapath. If this is false then there are 2 possible reasons: (a) the admin-state is disable (b) there is another IP route for the same prefix that has a superior preference
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">installed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">installed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**summary-only** *boolean*

<b>Description</b>	When set to true the router blocks the advertisement of all contributing routes of this aggregate route in dynamic protocols such as BGP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">aggregate-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">summary-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">summary-only</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bfd**

<b>Description</b>	Container for BFD related network-instance related configuration
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd</a>
<b>Tree</b>	<a href="#">bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**seamless-bfd**

<b>Description</b>	Container for BFD related network-instance related configuration
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd</a> <a href="#">seamless-bfd</a>
<b>Tree</b>	<a href="#">seamless-bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer** [address](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Enter the peer list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd</a> <a href="#">seamless-bfd</a> <a href="#">peer</a> <a href="#">address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** (*ipv4-address* | *ipv6-address*)

**Description** An IPv4 or IPv6 address of the farend seamless-bfd discriminator binding

**Context** [network-instance name](#) *string* [bfd seamless-bfd peer address](#) (*ipv4-address* | *ipv6-address*)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **discriminator number**

**Description** Static seamless-BFD discriminator for the farend binding

**Context** [network-instance name](#) *string* [bfd seamless-bfd peer address](#) (*ipv4-address* | *ipv6-address*) [discriminator number](#)

**Tree** [discriminator](#)

**Range** 524288 to 526335

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reflector name** *string*

**Description** List of seamless BFD reflector instances

**Context** [network-instance name](#) *string* [bfd seamless-bfd reflector name](#) *string*

**Tree** [reflector](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 1

### **name** *string*

**Description** A name for the local seamless-bfd reflector agent

**Context** [network-instance name](#) *string* [bfd seamless-bfd reflector name](#) *string*

**String Length** 1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Used to administratively enable or disable seamless-bfd reflector
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd seamless-bfd reflector name</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	Description of the seamless-bfd reflector
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd seamless-bfd reflector name</a> <i>string</i> <b>description</b> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-discriminator** *number*

<b>Description</b>	Seamless-BFD discriminator for the local reflector agent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bfd seamless-bfd reflector name</a> <i>string</i> <b>local-discriminator</b> <i>number</i>
<b>Tree</b>	<a href="#">local-discriminator</a>
<b>Range</b>	524288 to 526335
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-rib**

<b>Description</b>	Container for BGP RIB state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a>
<b>Tree</b>	<a href="#">bgp-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**afi-safi** [afi-safi-name](#) *identityref*

<b>Description</b>	List of address families with routes in the BGP RIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">afi-safi</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**afi-safi-name** *identityref*

<b>Description</b>	The name of the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <a href="#">ipv6-labeled-unicast</a> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <a href="#">evpn</a> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <a href="#">route-target</a> Route target constraint routes (AFI 1, SAFI 132)</li> </ul>

- sr-policy-ipv4  
SR-TE Policy (AFI 1, SAFI 73)
- sr-policy-ipv6  
SR-TE Policy (AFI 2, SAFI 73)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ipv4-labeled-unicast

<b>Description</b>	Container for RIB state of labeled IPv4-unicast routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv4-labeled-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local-rib

<b>Description</b>	Container for local RIB, containing all imported routes from other protocols plus the post-import-policy version of all label-IPv4 routes learned from all BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number*

<b>Description</b>	List of label-IPv4 routes in the local RIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix context

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) *identityref* [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) *identityref* [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

**Description** If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) *identityref* [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) *identityref* [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **origin-protocol** *identityref*

**Description** If the route was imported from another protocol, this is the protocol name.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) *identityref* [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) *identityref* [path-id](#) *number*

**Options**

- **aggregate**  
Locally configured aggregate route
- **arp-nd**  
IP route added by ARP ND.
- **bgp**  
Border Gateway Protocol version 4
- **bgp-label**

## Border Gateway Protocol labeled routes

- bgp-evpn  
BGP Ethernet VPN (EVPN)
- bgp-ipvpn  
BGP IP VPN
- dhcp  
IP (default) route added by DHCP.
- gribi  
A gRIBI route
- host  
A host route
- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id number****Description**

Path identifier of the BGP route

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-*

*address-with-zone | ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) [number](#)

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attr-id reference****Description**Leaf reference to [networkinstance/bgp-rib/attr-sets/attr-set/index](#)**Context**[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix | ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [attr-id](#) *reference***Tree**[attr-id](#)**Reference**[network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) *number***Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-route boolean****Description**

Set to true if the route is being used as backup path for the prefix.

**Context**[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix | ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [backup-route](#) *boolean***Tree**[backup-route](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**best-route boolean****Description**

Set to true if the route is the BGP best path for the prefix.

**Context**[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix | ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [best-route](#) *boolean***Tree**[best-route](#)**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-best *boolean*

**Description** Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) *number* **group-best** *boolean*

**Tree** [group-best](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### invalid-reason

**Description** Enter the invalid-reason context

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) *number* **invalid-reason**

**Tree** [invalid-reason](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### as-loop *boolean*

**Description** Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) *number* [invalid-reason](#) **as-loop** *boolean*

**Tree** [as-loop](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <b>stale-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <b>tie-break-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> </ul>

- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) *number* **used-route** *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) *number* **valid-route** *boolean*

**Tree**[valid-route](#)**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rib-in-out

**Description** Container for BGP routes learned and advertised to BGP neighbors

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#)

**Tree** [rib-in-out](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rib-in-post

**Description** Container for the post-import-policy version of BGP routes learned from BGP neighbors

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#)

**Tree** [rib-in-post](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

**Description** List of IPv4 routes

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Tree** [route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix context

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to <a href="#">networkinstance/protocols/bgp/rib/ attr-sets/attr-set/index</a>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib
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The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:

<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">internal-tags</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

## invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## as-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">stale-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> </ul>

- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [used-route](#) *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [valid-route](#) *boolean*

**Tree**[valid-route](#)**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rib-in-pre

**Description** Container for the pre-import-policy version of BGP routes learned from BGP neighbors

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-pre](#)

**Tree** [rib-in-pre](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

**Description** List of IPv4 routes

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Tree** [route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix context

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

**Description** If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attr-id reference**

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-mpls-label (number | keyword)**

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>IPV4_EXPLICIT_NULL</li> </ul>



- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

## rib-out-post

<b>Description</b>	Container for the post-export-policy version of BGP routes advertised to BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a>
<b>Tree</b>	<a href="#">rib-out-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

<b>Description</b>	List of IPv4 routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised-mpls-label** (*number* | *keyword*)

<b>Description</b>	Advertised MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">advertised-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">advertised-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**attr-id reference**

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id reference</a>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-unicast**

<b>Description</b>	Container for RIB state of IPv4-unicast routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-rib**

<b>Description</b>	Container for local RIB, containing all imported routes from other protocols plus the post-import-policy version of all IPv4 routes learned from all BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **origin-protocol** [identityref](#) **path-id** *number*

<b>Description</b>	List of IPv4 routes in the local RIB
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **origin-protocol** [identityref](#)

<b>Description</b>	If the route was imported from another protocol, this is the protocol name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">aggregate</a> Locally configured aggregate route</li> <li>• <a href="#">arp-nd</a> IP route added by ARP ND.</li> <li>• <a href="#">bgp</a> Border Gateway Protocol version 4</li> <li>• <a href="#">bgp-label</a></li> </ul>

Border Gateway Protocol labeled routes

- bgp-evpn  
BGP Ethernet VPN (EVPN)
- bgp-ipvpn  
BGP IP VPN
- dhcp  
IP (default) route added by DHCP.
- gribi  
A gRIBI route
- host  
A host route
- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

**path-id number**

**Description**

Path identifier of the BGP route

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/bgp-rib/attr-sets/attr-set/index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**invalid-reason**

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### rejected-route *boolean*

**Description** Indicates true if the route was rejected by an import policy.

**Context** [network-instance name string](#) [bgp-rib afi-safi afi-safi-name identityref](#) [ipv4-unicast local-rib route prefix \(ipv4-prefix | ipv6-prefix\)](#) [neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\)](#) [origin-protocol identityref path-id number invalid-reason rejected-route boolean](#)

**Tree** [rejected-route](#)

**Configurable** False

**Platforms** Supported on all platforms

### last-modified *string*

**Description** Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.

**Context** [network-instance name string](#) [bgp-rib afi-safi afi-safi-name identityref](#) [ipv4-unicast local-rib route prefix \(ipv4-prefix | ipv6-prefix\)](#) [neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\)](#) [origin-protocol identityref path-id number last-modified string](#)

**Tree** [last-modified](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### neighbor-as *number*

**Description** The last external AS to advertise the route into the local AS

**Context** [network-instance name string](#) [bgp-rib afi-safi afi-safi-name identityref](#) [ipv4-unicast local-rib route prefix \(ipv4-prefix | ipv6-prefix\)](#) [neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\)](#) [origin-protocol identityref path-id number neighbor-as number](#)

**Tree** [neighbor-as](#)

**Range** 1 to 4294967295

**Configurable** False

**Platforms** Supported on all platforms

**pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">stale-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> </ul>

- originator-id
- cluster-list
- extended-community
- aigp
- missing-attribute
- rtm-pref
- owner
- eigrp-labeled
- vpn-route
- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

Supported on all platforms

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [used-route](#) *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

Supported on all platforms

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">valid-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rib-in-out**

<b>Description</b>	Container for BGP routes learned and advertised to BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a>
<b>Tree</b>	<a href="#">rib-in-out</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rib-in-post**

<b>Description</b>	Container for the post-import-policy version of BGP routes learned from BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a>
<b>Tree</b>	<a href="#">rib-in-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route** [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of IPv4 routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>

<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib afi-safi afi-safi-name identityref</a> <a href="#">ipv4-unicast rib-in-out rib-in-post route prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id number</a> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib afi-safi afi-safi-name identityref</a> <a href="#">ipv4-unicast rib-in-out rib-in-post route prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id number</a> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib afi-safi afi-safi-name identityref</a> <a href="#">ipv4-unicast rib-in-out rib-in-post route prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id number</a> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

**invalid-reason**

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a>



	<a href="#">(ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> <a href="#">(ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor</a> <a href="#">(ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> <a href="#">(ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor</a> <a href="#">(ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">last-modified</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> <a href="#">(ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor</a> <a href="#">(ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">neighbor-as</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">neighbor-as</a>

<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### pending-delete *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>pending-delete</b> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### stale-route *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>stale-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### tie-break-reason *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>tie-break-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> </ul>

- next-hop-cost
- med
- local-pref
- aggregate
- originator-id
- cluster-list
- extended-community
- aigp
- missing-attribute
- rtm-pref
- owner
- eigrp-labeled
- vpn-route
- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

Supported on all platforms

### **used-route** *boolean*

**Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [used-route](#) *boolean*

**Tree**

[used-route](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <b>valid-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rib-in-pre**

<b>Description</b>	Container for the pre-import-policy version of BGP routes learned from BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route** [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#)

<b>Description</b>	List of IPv4 routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	Enter the prefix context
--------------------	--------------------------

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **attr-id** *reference*

<b>Description</b>	Leaf reference to <a href="#">networkinstance/protocols/bgp/rib/attr-sets/attr-set/index</a>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">attr-id</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rib-out-post**

<b>Description</b>	Container for the post-export-policy version of BGP routes advertised to BGP neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a>
<b>Tree</b>	<a href="#">rib-out-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix | ipv6-prefix*) **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **path-id** *number*

<b>Description</b>	List of IPv4 routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**attr-id reference**

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/ attr-sets/attr-set/index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id number</a> <a href="#">attr-id reference</a>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ipv6-labeled-unicast**

<b>Description</b>	Container for RIB state of labeled IPv6-unicast routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv6-labeled-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-rib**

<b>Description</b>	Container for local RIB, containing all imported routes from other protocols plus the post-import-policy version of all label-IPv4 routes learned from all BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **origin-protocol** **identityref** **path-id** **number**

<b>Description</b>	List of label-IPv6 routes in the local RIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <b>identityref</b> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <b>route</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-protocol</b> <b>identityref</b> <b>path-id</b> <b>number</b>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <b>identityref</b> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <b>route</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-protocol</b> <b>identityref</b> <b>path-id</b> <b>number</b>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <b>identityref</b> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <b>route</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-protocol</b> <b>identityref</b> <b>path-id</b> <b>number</b>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**origin-protocol** *identityref*

<b>Description</b>	If the route was imported from another protocol, this is the protocol name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>aggregate</b> Locally configured aggregate route</li> <li>• <b>arp-nd</b> IP route added by ARP ND.</li> <li>• <b>bgp</b> Border Gateway Protocol version 4</li> <li>• <b>bgp-label</b> Border Gateway Protocol labeled routes</li> <li>• <b>bgp-evpn</b> BGP Ethernet VPN (EVPN)</li> <li>• <b>bgp-ipvpn</b> BGP IP VPN</li> <li>• <b>dhcp</b> IP (default) route added by DHCP.</li> <li>• <b>gribi</b> A gRIBI route</li> <li>• <b>host</b> A host route</li> <li>• <b>isis</b> IS-IS</li> <li>• <b>local</b> A directly connected route</li> <li>• <b>linux</b> IP route added by the linux kernel.</li> <li>• <b>ndk1</b> Route added by an agent application using the NDK</li> <li>• <b>ndk2</b> Route added by an agent application using the NDK</li> <li>• <b>ospfv2</b> OSPFv2</li> </ul>

- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id number**

**Description** Path identifier of the BGP route

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id reference**

**Description** Leaf reference to networkinstance/bgp-rib/attr-sets/attr-set/index

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number* [attr-id](#) *reference*

**Tree** [attr-id](#)

**Reference** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **backup-route boolean**

**Description** Set to true if the route is being used as backup path for the prefix.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number* [backup-route](#) *boolean*

<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### best-route *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-best *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### as-loop *boolean*

**Description** Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [invalid-reason](#) [as-loop](#) *boolean*

**Tree** [as-loop](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cluster-loop *boolean*

**Description** Indicates true if the BGP route has a cluster-list loop.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [invalid-reason](#) [cluster-loop](#) *boolean*

**Tree** [cluster-loop](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### fib-programming-failed *boolean*

**Description** Indicates true if FIB programming failed

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [invalid-reason](#) [fib-programming-failed](#) *boolean*

**Tree** [fib-programming-failed](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">stale-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> </ul>

- none
- origin
- as-path-length
- next-hop-cost
- med
- local-pref
- aggregate
- originator-id
- cluster-list
- extended-community
- aigp
- missing-attribute
- rtm-pref
- owner
- eigrp-labeled
- vpn-route
- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">used-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">valid-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-out**

<b>Description</b>	Container for BGP routes learned and advertised to BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a>
<b>Tree</b>	<a href="#">rib-in-out</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-post**

<b>Description</b>	Container for the post-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a>
<b>Tree</b>	<a href="#">rib-in-post</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

**Description** List of label-IPv6 routes

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Tree** [route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix context

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

**Description** If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

**Description** Path identifier of the BGP route

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-best *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### internal-tags *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

### invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>

<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-allocation-failed *boolean*

**Description** Indicates true if dynamic-label-block has no more free labels

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [invalid-reason](#) [label-allocation-failed](#) *boolean*

**Tree** [label-allocation-failed](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop-unresolved *boolean*

**Description** Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [invalid-reason](#) [next-hop-unresolved](#) *boolean*

**Tree** [next-hop-unresolved](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rejected-route *boolean*

**Description** Indicates true if the route was rejected by an import policy.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [invalid-reason](#) [rejected-route](#) *boolean*

**Tree** [rejected-route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">stale-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> </ul>



- none
- origin
- as-path-length
- next-hop-cost
- med
- local-pref
- aggregate
- originator-id
- cluster-list
- extended-community
- aigp
- missing-attribute
- rtm-pref
- owner
- eigrp-labeled
- vpn-route
- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">used-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">valid-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-pre**

<b>Description</b>	Container for the pre-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of label-IPv6 routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )

[neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*  
[attr-id](#) *reference*

**Tree** [attr-id](#)

**Reference** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) *index* *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-mpls-label (*number* | *keyword*)

**Description** Received MPLS label value

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) *identityref* [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)  
[neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*  
[received-mpls-label](#) (*number* | *keyword*)

**Tree** [received-mpls-label](#)

**Range** 16 to 1048575

**Options**

- IPV4\_EXPLICIT\_NULL
- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 1

### rib-out-post

**Description** Container for the post-export-policy version of BGP routes advertised to BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) *identityref* [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-out-post](#)

**Tree** [rib-out-post](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route prefix** (*ipv4-prefix | ipv6-prefix*) **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **path-id number**

<b>Description</b>	List of label-IPv6 routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertised-mpls-label (*number* | *keyword*)

**Description** Advertised MPLS label value

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-out-post](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* [advertised-mpls-label](#) (*number* | *keyword*)

**Tree** [advertised-mpls-label](#)

**Range** 16 to 1048575

**Options**

- IPV4\_EXPLICIT\_NULL
- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 1

### attr-id *reference*

**Description** Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [rib-in-out](#) [rib-out-post](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* [attr-id](#) *reference*

**Tree** [attr-id](#)

**Reference** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-unicast

**Description** Container for RIB state of IPv6-unicast routes.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#)

<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## local-rib

<b>Description</b>	Container for local RIB, containing all imported routes from other protocols plus the post-import-policy version of all IPv4 routes learned from all BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix | ipv6-prefix*) **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) [origin-protocol](#) *identityref* [path-id](#) *number*

<b>Description</b>	List of IPv6 routes in the local RIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <i>identityref</i> <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **origin-protocol** *identityref*

<b>Description</b>	If the route was imported from another protocol, this is the protocol name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>aggregate</b> Locally configured aggregate route</li> <li>• <b>arp-nd</b> IP route added by ARP ND.</li> <li>• <b>bgp</b> Border Gateway Protocol version 4</li> <li>• <b>bgp-label</b> Border Gateway Protocol labeled routes</li> <li>• <b>bgp-evpn</b> BGP Ethernet VPN (EVPN)</li> <li>• <b>bgp-ipvpn</b> BGP IP VPN</li> <li>• <b>dhcp</b> IP (default) route added by DHCP.</li> <li>• <b>gribi</b> A gRIBI route</li> <li>• <b>host</b> A host route</li> <li>• <b>isis</b> IS-IS</li> <li>• <b>local</b> A directly connected route</li> <li>• <b>linux</b> IP route added by the linux kernel.</li> <li>• <b>ndk1</b></li> </ul>



Route added by an agent application using the NDK

- ndk2

Route added by an agent application using the NDK

- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

### **path-id number**

**Description**

Path identifier of the BGP route

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number*

**Configurable**

False

**Platforms**

Supported on all platforms

### **attr-id reference**

**Description**

Leaf reference to [networkinstance/protocols/bgp/rib/attr-sets/attr-set/index](#)

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [origin-protocol](#) [identityref](#) [path-id](#) *number* [attr-id](#) *reference*

**Tree**

[attr-id](#)

**Reference**

[network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) *index* *number*

**Configurable**

False

**Platforms**

Supported on all platforms

### **backup-route boolean**

**Description**

Set to true if the route is being used as backup path for the prefix.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [local-rib](#) [route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-*

	<i>with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">backup-route</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">best-route</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**invalid-reason**

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-</a>

	<i>with-zone   ipv6-address-with-zone) origin-protocol identityref path-id number invalid-reason label-allocation-failed boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name string bgp-rib afi-safi afi-safi-name identityref ipv6-unicast local-rib route prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) origin-protocol identityref path-id number invalid-reason next-hop-unresolved boolean</a>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name string bgp-rib afi-safi afi-safi-name identityref ipv6-unicast local-rib route prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) origin-protocol identityref path-id number invalid-reason rejected-route boolean</a>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name string bgp-rib afi-safi afi-safi-name identityref ipv6-unicast local-rib route prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) origin-protocol identityref path-id number last-modified string</a>
<b>Tree</b>	<a href="#">last-modified</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">stale-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">origin-protocol</a> <a href="#">identityref</a> <a href="#">path-id</a> <i>number</i> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> <li>• local-peer</li> <li>• multi-path</li> <li>• vpn-rd</li> <li>• next-hop-type</li> <li>• invalid-route</li> <li>• origin-validation</li> <li>• long-live-gr-stale</li> <li>• default-originate</li> <li>• fib-install-disabled</li> </ul>

- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

Supported on all platforms

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [used-route](#) *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

Supported on all platforms

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [local-rib](#) [route](#) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [origin-protocol](#) [identityref](#) [path-id](#) [number](#) [valid-route](#) *boolean*

**Tree**[valid-route](#)**Configurable**

False

**Platforms**

Supported on all platforms

**rib-in-out****Description**

Container for BGP routes learned and advertised to BGP neighbors.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-unicast](#) [rib-in-out](#)

**Tree**[rib-in-out](#)**Configurable**

False

**Platforms**

Supported on all platforms

**rib-in-post**

<b>Description</b>	Container for the post-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a>
<b>Tree</b>	<a href="#">rib-in-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix | ipv6-prefix*) **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **path-id** *number*

<b>Description</b>	List of IPv6 routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**attr-id reference**

<b>Description</b>	Leaf reference to <a href="#">networkinstance/protocols/bgp/rib/attr-sets/attr-set/index</a> .
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-route boolean**

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**best-route boolean**

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">best-route</a> <i>boolean</i>

<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### group-best *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### internal-tags *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

### invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>

<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">stale-route</a> <i>boolean</i>

<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>tie-break-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> <li>• local-peer</li> <li>• multi-path</li> <li>• vpn-rd</li> <li>• next-hop-type</li> <li>• invalid-route</li> </ul>

- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### used-route *boolean*

<b>Description</b>	Indicates true if the route is being used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">used-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### valid-route *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">valid-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rib-in-pre

<b>Description</b>	Container for the pre-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id number**

<b>Description</b>	List of IPv6 routes.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>



<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### attr-id reference

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rib-out-post

<b>Description</b>	Container for the post-export-policy version of BGP routes advertised to BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a>
<b>Tree</b>	<a href="#">rib-out-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

[route](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

<b>Description</b>	List of IPv6 routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## I3vpn-ipv4-unicast

<b>Description</b>	Container for RIB state of VPN-IPv4 unicast routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">I3vpn-ipv4-unicast</a>
<b>Tree</b>	<a href="#">I3vpn-ipv4-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local-rib

<b>Description</b>	Container for local RIB  Includes the post import-policy RIB-INS corresponding to VPN-IPv4 routes received from default net-instance BGP peers (post import-policy means after processing by the BGP import policy attached to the default net-instance peer and after processing by the vrf-import policy of importing IP VRF network instances) plus the post vrf-export policy “imported” routes from local IP-VRF network instances.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">I3vpn-ipv4-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of VPN-IPv4 unicast routes in the local RIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b*)

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/bgp-rib/attr-sets/attr-set/index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>

*route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* [best-route](#) *boolean*

<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **imported-ip-vrf-network-instances** *reference*

<b>Description</b>	List of IP-VRF network instances that imported the route
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">imported-ip-vrf-network-instances</a> <i>reference</i>
<b>Tree</b>	<a href="#">imported-ip-vrf-network-instances</a>
<b>Reference</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **invalid-reason**

<b>Description</b>	Enter the invalid-reason context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pending-delete *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>pending-delete</b> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-mpls-label (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>received-mpls-label</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### stale-route *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">stale-route</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> </ul>

- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref I3vpn-ipv4-unicast](#) [local-rib](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* **used-route** *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref I3vpn-ipv4-unicast](#) [local-rib](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* **valid-route** *boolean*

**Tree**[valid-route](#)**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rib-in-out

**Description** Container for BGP routes learned and advertised to BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#)

**Tree** [rib-in-out](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rib-in-post

**Description** Container for the post-import-policy version of BGP routes learned from BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-post](#)

**Tree** [rib-in-post](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#)

**Description** List of VPN-IPv4 unicast routes

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#)

**Tree** [route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b*)

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### attr-id *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/ attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### backup-route *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### best-route *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">best-route</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">group-best</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **imported-ip-vrf-network-instances** *reference*

<b>Description</b>	List of IP-VRF network instances that imported the route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">imported-ip-vrf-network-instances</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">imported-ip-vrf-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <b>internal-tags</b> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

**invalid-reason**

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <b>invalid-reason</b>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**as-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <b>as-loop</b> <i>boolean</i>

<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cluster-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### fib-programming-failed *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-allocation-failed *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-</a>

*address-with-zone | ipv6-address-with-zone*) *path-id number invalid-reason label-allocation-failed boolean*

**Tree** [label-allocation-failed](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop-unresolved** *boolean*

**Description** Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.

**Context** [network-instance name string bgp-rib afi-safi afi-safi-name identityref l3vpn-ipv4-unicast rib-in-out rib-in-post route route-distinguisher \(route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b\) prefix \(ipv4-prefix | ipv6-prefix\) neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\) path-id number invalid-reason next-hop-unresolved boolean](#)

**Tree** [next-hop-unresolved](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rejected-route** *boolean*

**Description** Indicates true if the route was rejected by an import policy.

**Context** [network-instance name string bgp-rib afi-safi afi-safi-name identityref l3vpn-ipv4-unicast rib-in-out rib-in-post route route-distinguisher \(route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b\) prefix \(ipv4-prefix | ipv6-prefix\) neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\) path-id number invalid-reason rejected-route boolean](#)

**Tree** [rejected-route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-modified** *string*

**Description** Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-

updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-mpls-label (*number* | *keyword*)

**Description** Received MPLS label value

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* **received-mpls-label** (*number* | *keyword*)

**Tree** [received-mpls-label](#)

**Range** 16 to 1048575

**Options**

- IPV4\_EXPLICIT\_NULL
- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 1

### stale-route *boolean*

**Description** Set to true if the route is stale due to BGP graceful restart.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* **stale-route** *boolean*

**Tree** [stale-route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tie-break-reason *keyword*

**Description** Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">tie-break-reason</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> <li>• local-peer</li> <li>• multi-path</li> <li>• vpn-rd</li> <li>• next-hop-type</li> <li>• invalid-route</li> <li>• origin-validation</li> <li>• long-live-gr-stale</li> <li>• default-originate</li> <li>• fib-install-disabled</li> <li>• peer-router-id</li> <li>• path-identifier</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean*

<b>Description</b>	Indicates true if the route is being used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">used-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">valid-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-pre**

<b>Description</b>	Container for the pre-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route route-distinguisher** (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id number**

**Description** List of VPN-IPv4 unicast routes learned from BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id number**

**Tree** [route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*)

**Description** The route distinguisher encoded in the NLRI.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id number**

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix context

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id number**

**Configurable** False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

**Description** If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

**Description** Path identifier of the BGP route

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

**Description** Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.

**Context** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) *number* [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* **attr-id** *reference*

**Tree** [attr-id](#)

**Reference** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**imported-ip-vrf-network-instances** *reference*

<b>Description</b>	List of IP-VRF network instances that imported the route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">imported-ip-vrf-network-instances</a> <i>reference</i>
<b>Tree</b>	<a href="#">imported-ip-vrf-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**rib-out-post**

<b>Description</b>	Container for the post-export-policy version of BGP routes advertised to BGP neighbors.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a>
<b>Tree</b>	<a href="#">rib-out-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route route-distinguisher** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of VPN-IPv4 unicast routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#))

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a> )

	<i>route-distinguisher-type-2b</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **advertised-mpls-label** (*number* | *keyword*)

<b>Description</b>	Advertised MPLS label value
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">advertised-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">advertised-mpls-label</a>

<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### attr-id reference

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">attr-id</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### l3vpn-ipv6-unicast

<b>Description</b>	Container for RIB state of VPN-IPv6 unicast routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a>
<b>Tree</b>	<a href="#">l3vpn-ipv6-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-rib

<b>Description</b>	<p>Container for local RIB</p> <p>Includes the post import-policy RIB-INS corresponding to VPN-IPv6 routes received from default net-instance BGP peers (post import-policy means after processing by the BGP import policy attached to the default net-</p>
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instance peer and after processing by the vrf-import policy of importing IP VRF network instances) plus the post vrf-export policy “imported” routes from local IP-VRF network instances.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a>
<b>Tree</b>	<a href="#">local-rib</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of VPN-IPv6 unicast routes in the local RIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#))

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	Enter the prefix context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to <a href="#">networkinstance/bgp-rib/attr-sets/attr-set/index</a>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>

<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>backup-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>best-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>group-best</b> <i>boolean</i>



<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### imported-ip-vrf-network-instances *reference*

<b>Description</b>	List of IP-VRF network instances that imported the route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">imported-ip-vrf-network-instances</a> <i>reference</i>
<b>Tree</b>	<a href="#">imported-ip-vrf-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### as-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-</a>

	<i>type-2b</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>

	<i>ipv6-address-with-zone</i> ) <i>path-id</i> <i>number</i> <i>invalid-reason</i> <i>label-allocation-failed</i> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <i>invalid-reason</i> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <i>invalid-reason</i> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-
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update received. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor-as** *number*

<b>Description</b>	The last external AS to advertise the route into the local AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">neighbor-as</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pending-delete** *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref I3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-mpls-label** (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <b>received-mpls-label</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <b>stale-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-</a>

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	<i>type-2b</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-id</b> <i>number</i> <b>tie-break-reason</b> <i>keyword</i>
<b>Tree</b>	<b>tie-break-reason</b>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> <li>• local-peer</li> <li>• multi-path</li> <li>• vpn-rd</li> <li>• next-hop-type</li> <li>• invalid-route</li> <li>• origin-validation</li> <li>• long-live-gr-stale</li> <li>• default-originate</li> <li>• fib-install-disabled</li> <li>• peer-router-id</li> <li>• path-identifier</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean*

<b>Description</b>	Indicates true if the route is being used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>used-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">used-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean*

<b>Description</b>	Indicates true if the route is valid.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">local-rib</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>valid-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-out**

<b>Description</b>	Container for BGP routes learned and advertised to BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <b>rib-in-out</b>
<b>Tree</b>	<a href="#">rib-in-out</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-post**

<b>Description</b>	Container for the post-import-policy version of BGP routes learned from BGP neighbors.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a>
<b>Tree</b>	<a href="#">rib-in-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route route-distinguisher** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#)

<b>Description</b>	List of VPN-IPv6 unicast routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#))

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a> )



	<i>route-distinguisher-type-2b</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/ attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <i>index</i> <i>number</i>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### backup-route *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>backup-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### best-route *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>best-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-best *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>group-best</b> <i>boolean</i>

<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### imported-ip-vrf-network-instances *reference*

<b>Description</b>	List of IP-VRF network instances that imported the route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">imported-ip-vrf-network-instances</a> <i>reference</i>
<b>Tree</b>	<a href="#">imported-ip-vrf-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### internal-tags *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib  The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

## invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## as-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## cluster-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rejected-route *boolean*

**Description** Indicates true if the route was rejected by an import policy.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [invalid-reason](#) [rejected-route](#) *boolean*

**Tree** [rejected-route](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-modified *string*

**Description** Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [last-modified](#) *string*

**Tree** [last-modified](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-as *number*

**Description** The last external AS to advertise the route into the local AS

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-](#)

	<i>address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <i>path-id</i> <i>number</i> <i>neighbor-as</i> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pending-delete *boolean*

<b>Description</b>	Set to true if the route is marked for deletion.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">pending-delete</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pending-delete</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-mpls-label (*number* | *keyword*)

<b>Description</b>	Received MPLS label value
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">received-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**stale-route** *boolean*

<b>Description</b>	Set to true if the route is stale due to BGP graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>stale-route</b> <i>boolean</i>
<b>Tree</b>	<a href="#">stale-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <b>tie-break-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> </ul>



- owner
- eigrp-labeled
- vpn-route
- ebgp-route
- peer-ip
- local-peer
- multi-path
- vpn-rd
- next-hop-type
- invalid-route
- origin-validation
- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) **used-route** *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-post](#) [route](#) [route-distinguisher](#) ([route-](#)

*distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** **number** **valid-route** **boolean**

<b>Tree</b>	<a href="#">valid-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rib-in-pre

<b>Description</b>	Container for the pre-import-policy version of BGP routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [route-distinguisher](#) (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*) **prefix** (*ipv4-prefix* | *ipv6-prefix*) **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** **number**

<b>Description</b>	List of VPN-IPv6 unicast routes learned from BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> ) <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-id</b> <b>number</b>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*)

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-</i>

*distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b) prefix (ipv4-prefix | ipv6-prefix) neighbor (ipv4-address-with-zone | ipv6-address-with-zone) path-id number*

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<i>network-instance name string bgp-rib afi-safi afi-safi-name identityref l3vpn-ipv6-unicast rib-in-out rib-in-pre route route-distinguisher (route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b) prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) path-id number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<i>network-instance name string bgp-rib afi-safi afi-safi-name identityref l3vpn-ipv6-unicast rib-in-out rib-in-pre route route-distinguisher (route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b) prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) path-id number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id number**

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<i>network-instance name string bgp-rib afi-safi afi-safi-name identityref l3vpn-ipv6-unicast rib-in-out rib-in-pre route route-distinguisher (route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b) prefix (ipv4-prefix   ipv6-prefix) neighbor (ipv4-address-with-zone   ipv6-address-with-zone) path-id number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### attr-id reference

**Description** Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [attr-id](#) [reference](#)

**Tree** [attr-id](#)

**Reference** [network-instance name](#) *string* [bgp-rib](#) [attr-sets](#) [attr-set](#) [index](#) [number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### imported-ip-vrf-network-instances reference

**Description** List of IP-VRF network instances that imported the route

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [imported-ip-vrf-network-instances](#) [reference](#)

**Tree** [imported-ip-vrf-network-instances](#)

**Reference** [network-instance name](#) *string*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-mpls-label (*number* | *keyword*)

**Description** Received MPLS label value

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast](#) [rib-in-out](#) [rib-in-pre](#) [route](#) [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#) [received-mpls-label](#) (*number* | *keyword*)

<b>Tree</b>	<a href="#">received-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">IPV4_EXPLICIT_NULL</a></li> <li>• <a href="#">IPV6_EXPLICIT_NULL</a></li> <li>• <a href="#">IMPLICIT_NULL</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### rib-out-post

<b>Description</b>	Container for the post-export-policy version of BGP routes advertised to BGP neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a>
<b>Tree</b>	<a href="#">rib-out-post</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [route-distinguisher](#) ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#)) [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#)) [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) [number](#)

<b>Description</b>	List of VPN-IPv6 unicast routes.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0 | route-distinguisher-type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b*)

<b>Description</b>	The route distinguisher encoded in the NLRI.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <i>route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b</i> ) <a href="#">prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">neighbor</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertised-mpls-label (*number* | *keyword*)

<b>Description</b>	Advertised MPLS label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">advertised-mpls-label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">advertised-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### attr-id *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> ) <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-target

**Description** Container for RIB state of RTC routes.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#)

**Tree** [route-target](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rib-in-out

**Description** Container for BGP routes learned and advertised to BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#)

**Tree** [rib-in-out](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rib-in-post

**Description** Container for the post-import-policy version of BGP routes learned from BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#)

**Tree** [rib-in-post](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**route origin-as** *number* **route-target-prefix** *string* **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **path-id** *number*

<b>Description</b>	List of RTC routes in the RIB-IN, after import-policy modification.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin-as** *number*

<b>Description</b>	The origin AS of the RTC route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-target-prefix** *string*

<b>Description</b>	The RTC prefix in the format number1:number2/length, where number1 is an IPv4 address or a 2-byte ASN or a 4-byte ASN, number2 is a 2-byte or 4-byte administrative value and length is a number of bits between 0 and 96  The default RTC prefix is represented by 0:0/0
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <a href="#">number</a> <a href="#">route-target-prefix</a> <a href="#">string</a> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <a href="#">number</a> <a href="#">route-target-prefix</a> <a href="#">string</a> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/ attr-sets/attr-set/index.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <a href="#">number</a> <a href="#">route-target-prefix</a> <a href="#">string</a> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <a href="#">number</a> <a href="#">attr-id</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-route** *boolean*

<b>Description</b>	Set to true if the route is being used as backup path for the prefix.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">backup-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**best-route** *boolean*

<b>Description</b>	Set to true if the route is the BGP best path for the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">best-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">best-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-best** *boolean*

<b>Description</b>	Set to true if the route is the best BGP route amongst all routes received from one particular neighbor AS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">group-best</a> <i>boolean</i>
<b>Tree</b>	<a href="#">group-best</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib
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The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

## invalid-reason

<b>Description</b>	Enter the invalid-reason context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a>
<b>Tree</b>	<a href="#">invalid-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## as-loop *boolean*

<b>Description</b>	Indicates true if the BGP route has an AS path loop that exceeds the configured threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">as-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cluster-loop** *boolean*

<b>Description</b>	Indicates true if the BGP route has a cluster-list loop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">cluster-loop</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cluster-loop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fib-programming-failed** *boolean*

<b>Description</b>	Indicates true if FIB programming failed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">fib-programming-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fib-programming-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-allocation-failed** *boolean*

<b>Description</b>	Indicates true if dynamic-label-block has no more free labels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">label-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-unresolved** *boolean*

<b>Description</b>	Indicates true if the BGP route has a BGP next-hop that cannot be resolved to an outgoing interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">next-hop-unresolved</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-unresolved</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rejected-route** *boolean*

<b>Description</b>	Indicates true if the route was rejected by an import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">invalid-reason</a> <a href="#">rejected-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rejected-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-modified** *string*

<b>Description</b>	Time of the last modification of the route stored in the BGP RIB. For a route learned from a BGP neighbor the initial value is the same as last-updatereceived. If an import policy later changed some attribute of the route last-modified would be updated to reflect the time of this change.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">last-modified</a> <i>string</i>
<b>Tree</b>	<a href="#">last-modified</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-as *number*

**Description** The last external AS to advertise the route into the local AS

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* [neighbor-as](#) *number*

**Tree** [neighbor-as](#)

**Range** 1 to 4294967295

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pending-delete *boolean*

**Description** Set to true if the route is marked for deletion.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* [pending-delete](#) *boolean*

**Tree** [pending-delete](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stale-route *boolean*

**Description** Set to true if the route is stale due to BGP graceful restart.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number* [stale-route](#) *boolean*

**Tree** [stale-route](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tie-break-reason** *keyword*

<b>Description</b>	Indicates the reason why a BGP route is sorted behind the next best route. The BGP best path displays a value of 'none'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">tie-break-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tie-break-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• none</li> <li>• origin</li> <li>• as-path-length</li> <li>• next-hop-cost</li> <li>• med</li> <li>• local-pref</li> <li>• aggregate</li> <li>• originator-id</li> <li>• cluster-list</li> <li>• extended-community</li> <li>• aigp</li> <li>• missing-attribute</li> <li>• rtm-pref</li> <li>• owner</li> <li>• eigrp-labeled</li> <li>• vpn-route</li> <li>• ebgp-route</li> <li>• peer-ip</li> <li>• local-peer</li> <li>• multi-path</li> <li>• vpn-rd</li> <li>• next-hop-type</li> <li>• invalid-route</li> <li>• origin-validation</li> </ul>



- long-live-gr-stale
- default-originate
- fib-install-disabled
- peer-router-id
- path-identifier

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-route** *boolean***Description**

Indicates true if the route is being used for forwarding.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* [used-route](#) *boolean*

**Tree**[used-route](#)**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**valid-route** *boolean***Description**

Indicates true if the route is valid.

**Context**

[network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-in-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [path-id](#) *number* [valid-route](#) *boolean*

**Tree**[valid-route](#)**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rib-in-pre****Description**

Container for the pre-import-policy version of BGP routes learned from BGP neighbors.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a>
<b>Tree</b>	<a href="#">rib-in-pre</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

<b>Description</b>	List of RTC routes in the RIB-IN, before import-policy modification.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin-as** *number*

<b>Description</b>	The origin AS of the RTC route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-target-prefix** *string*

<b>Description</b>	The RTC prefix in the format <code>number1:number2/length</code> , where <code>number1</code> is an IPv4 address or a 2-byte ASN or a 4-byte ASN, <code>number2</code> is a 2-byte or 4-byte administrative value and <code>length</code> is a number of bits between 0 and 96  The default RTC prefix is represented by <code>0:0/0</code>
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **attr-id** *reference*

<b>Description</b>	Leaf reference to <a href="#">networkinstance/protocols/bgp/rib/attr-sets/attr-set/index</a> .
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-in-pre</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rib-out-post

**Description** Container for the post-export-policy version of BGP routes advertised to BGP neighbors.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-out-post](#)

**Tree** [rib-out-post](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route** [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

**Description** List of RTC routes in the RIB-OUT, after export-policy modification.

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-out-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

**Tree** [route](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## origin-as *number*

**Description** The origin AS of the RTC route

**Context** [network-instance name](#) *string* [bgp-rib](#) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [rib-in-out](#) [rib-out-post](#) [route](#) [origin-as](#) *number* [route-target-prefix](#) *string* [neighbor](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [path-id](#) *number*

**Range** 1 to 4294967295

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-target-prefix** *string*

<b>Description</b>	The RTC prefix in the format number1:number2/length, where number1 is an IPv4 address or a 2-byte ASN or a 4-byte ASN, number2 is a 2-byte or 4-byte administrative value and length is a number of bits between 0 and 96  The default RTC prefix is represented by 0:0/0
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">path-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attr-id** *reference*

<b>Description</b>	Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">rib-in-out</a> <a href="#">rib-out-post</a> <a href="#">route</a> <a href="#">origin-as</a> <i>number</i> <a href="#">route-target-prefix</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">path-id</a> <i>number</i> <a href="#">attr-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">attr-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## attr-sets

<b>Description</b>	Container for BGP RIB path attribute sets that can be shared by one or more BGP routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a>
<b>Tree</b>	<a href="#">attr-sets</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## attr-set *index number*

<b>Description</b>	List of attribute sets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Tree</b>	<a href="#">attr-set</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## index *number*

<b>Description</b>	A unique internal identifier of the attribute set.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## aggregator

<b>Description</b>	Enter the aggregator context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">aggregator</a>
<b>Tree</b>	<a href="#">aggregator</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The router ID of the BGP router that formed the aggregate route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">aggregator address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **as-number** *number*

<b>Description</b>	The 2byte or 4byte AS number of the router that formed the aggregate route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">aggregator as-number</a> <i>number</i>
<b>Tree</b>	<a href="#">as-number</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **aigp** *number*

<b>Description</b>	The value in the AIGP path attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">aigp number</a>
<b>Tree</b>	<a href="#">aigp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **as-path**

<b>Description</b>	A container for the AS path attribute of the attribute set.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">as-path</a>
<b>Tree</b>	<a href="#">as-path</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **segment** [as-path-index](#) *number*

<b>Description</b>	A list of segments. Each segment has a type and a list of one or more AS numbers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">as-path segment as-path-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **as-path-index** *number*

<b>Description</b>	RIB attribute AS Path index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">as-path segment as-path-index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **member** *number*

<b>Description</b>	A list of AS numbers (each of which is a 2byte-ASN or a 4byte-ASN) that belong to the AS path segment.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">as-path segment as-path-index</a> <i>number</i> <a href="#">member</a> <i>number</i>
<b>Tree</b>	<a href="#">member</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **type** *keyword*

<b>Description</b>	The type of the AS path segment.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">as-path segment as-path-index</a> <i>number</i> <a href="#">type</a> <i>keyword</i>



<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">as-set</a></li> <li>• <a href="#">as-sequence</a></li> <li>• <a href="#">as-confed-sequence</a></li> <li>• <a href="#">as-confed-set</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **atomic-aggregate** *boolean*

<b>Description</b>	Set to true to indicate the presence of the ATOMIC_AGGREGATE path attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">atomic-aggregate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">atomic-aggregate</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **cluster-list** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The list of IPv4 addresses in the CLUSTER_LIST path attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">cluster-list</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">cluster-list</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **communities**

<b>Description</b>	Container for different types of BGP communities
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">communities</a>
<b>Tree</b>	<a href="#">communities</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**community** *string*

<b>Description</b>	List of standard 4-byte community values in the COMMUNITY path attribute. Each should be displayed in the format <0..65355>:<0..65535>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">communities community</a> <i>string</i>
<b>Tree</b>	<a href="#">community</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ext-community** *string*

<b>Description</b>	List of extended 8-byte community values in the COMMUNITY path attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">communities ext-community</a> <i>string</i>
<b>Tree</b>	<a href="#">ext-community</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**large-community** *string*

<b>Description</b>	List of large 12-byte community values in the LARGE_COMMUNITY path attribute. Each should be displayed in the format: <0..4294967295>:<0..4294967295>:< 0..4294967295>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">communities large-community</a> <i>string</i>
<b>Tree</b>	<a href="#">large-community</a>
<b>String Length</b>	1 to 72
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-pref** *number*

<b>Description</b>	The value of the LOCAL_PREF path attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">local-pref</a> <i>number</i>
<b>Tree</b>	<a href="#">local-pref</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **med** *number*

**Description** The value of the MULTI\_EXIT\_DISC path attribute.

**Context** [network-instance name](#) *string* [bgp-rib attr-sets attr-set index](#) *number* [med number](#)

**Tree** [med](#)

**Configurable** False

**Platforms** Supported on all platforms

### **next-hop** (*ipv4-address-with-zone | ipv6-address-with-zone*)

**Description** The IPv4 or IPv6 address of the BGP next-hop (extracted from the NEXT\_HOP field of the UPDATE or the MP\_REACH\_NLRI next-hop).

**Context** [network-instance name](#) *string* [bgp-rib attr-sets attr-set index](#) *number* [next-hop \(ipv4-address-with-zone | ipv6-address-with-zone\)](#)

**Tree** [next-hop](#)

**Configurable** False

**Platforms** Supported on all platforms

### **origin** *keyword*

**Description** The value of the ORIGIN path attribute

**Context** [network-instance name](#) *string* [bgp-rib attr-sets attr-set index](#) *number* [origin keyword](#)

**Tree** [origin](#)

**Options**

- [igp](#)
- [egp](#)
- [incomplete](#)

**Configurable** False

**Platforms** Supported on all platforms

### **originator-id** (*ipv4-address | ipv6-address*)

**Description** The address in the ORIGINATOR\_ID attribute added by a route reflector.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number originator-id</a> ( <i>ipv4-address   ipv6-address</i> )
<b>Tree</b>	<a href="#">originator-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## pmsi-tunnel

<b>Description</b>	A container for the Provider Multicast Service Interface Tunnel Attribute (PTA) of the attribute set.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number pmsi-tunnel</a>
<b>Tree</b>	<a href="#">pmsi-tunnel</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## flags

<b>Description</b>	A container for the PTA Flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number pmsi-tunnel flags</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## assisted-replication-type *keyword*

<b>Description</b>	The value of the assisted-replication role type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number pmsi-tunnel flags assisted-replication-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">assisted-replication-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• ar-replicator</li> <li>• ar-leaf</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**leaf-information-required** *boolean*

<b>Description</b>	The value of the Leaf Information Required (LIR) flag.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel flags leaf-information-required</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leaf-information-required</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pruned-flood-list**

<b>Description</b>	A container for the optimized ingress replication pruned flood list flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel flags pruned-flood-list</a>
<b>Tree</b>	<a href="#">pruned-flood-list</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**broadcast-multicast** *keyword*

<b>Description</b>	The value of the broadcast-multicast flag.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel flags pruned-flood-list broadcast-multicast</a> <i>keyword</i>
<b>Tree</b>	<a href="#">broadcast-multicast</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**unknown-unicast** *keyword*

<b>Description</b>	The value of the unknown-unicast flag.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel flags pruned-flood-list unknown-unicast</a> <i>keyword</i>
<b>Tree</b>	<a href="#">unknown-unicast</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 0</li> </ul>

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<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## label

<b>Description</b>	The encoded label value and type in the PMSI Tunnel Attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel label</a>
<b>Tree</b>	<a href="#">label</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## value *number*

<b>Description</b>	The value of the label field If the route is an EVPN MPLS route, the mpls-label is read out of the 20-bit high order value. If the route is an EVPN VXLAN route, the vni is read out of the 24-bit value. If the route is an EVPN SRv6 route, this field is set to zero if no transposition is used and set to a non-zero value if transposition is used.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel label value</a> <i>number</i>
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## value-type *keyword*

<b>Description</b>	Whether the encoded label value is an mpls-label, a vni or a transposed function or argument
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel label value-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">value-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mpls-label</li> <li>• vni</li> <li>• transposed-srv6-function</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### tunnel-endpoint (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The value of the tunnel-endpoint in the PMSI Tunnel Attribute.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel tunnel-endpoint</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">tunnel-endpoint</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### tunnel-type *keyword*

<b>Description</b>	The value of the tunnel-type in the PMSI Tunnel Attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">pmsi-tunnel tunnel-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tunnel-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-tunnel</li> <li>• rsvp-te-p2mp</li> <li>• mldp-p2mp</li> <li>• pim-ssm</li> <li>• pim-sm</li> <li>• bidir-pim</li> <li>• ingress-replication</li> <li>• mldp-mp2mp</li> <li>• assisted-replication</li> <li>• bier</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### prefix-sid

<b>Description</b>	This container defines Prefix SID TLVs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">prefix-sid</a>
<b>Tree</b>	<a href="#">prefix-sid</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tlv type identityref

<b>Description</b>	List of TLV types in the LSDB for the specified LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">prefix-sid tlv type identityref</a>
<b>Tree</b>	<a href="#">tlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### type identityref

<b>Description</b>	The type of TLV being described. The type of TLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">prefix-sid tlv type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>label-index Label index TLV</li> <li>srgb-originator SRGB originator TLV</li> <li>srv6-l3-service SRv6 L3 service TLV</li> <li>srv6-l2-service SRv6 L2 service TLV</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-index

<b>Description</b>	This container defines TLV 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">prefix-sid tlv type identityref label-index</a>
<b>Tree</b>	<a href="#">label-index</a>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-index *number*

<b>Description</b>	32-bit value representing the index value in the SRGB space
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number prefix-sid tlv type</a> <a href="#">identityref</a> <a href="#">label-index label-index number</a>
<b>Tree</b>	<a href="#">label-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### srgb-originator

<b>Description</b>	This container defines TLV 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number prefix-sid tlv type</a> <a href="#">identityref</a> <a href="#">srgb-originator</a>
<b>Tree</b>	<a href="#">srgb-originator</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### srgb *string*

<b>Description</b>	List of SRGB ranges, each in the format <first-label>:<number-of-labels>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index number prefix-sid tlv type</a> <a href="#">identityref</a> <a href="#">srgb-originator</a> <a href="#">srgb string</a>
<b>Tree</b>	<a href="#">srgb</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-attributes

<b>Description</b>	Container for unknown path attributes
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i> <a href="#">unknown-attributes</a>
<b>Tree</b>	<a href="#">unknown-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **unknown-attribute** [unknown-attr-index](#) *number*

<b>Description</b>	List of unknown BGP path attributes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i> <a href="#">unknown-attributes</a> <a href="#">unknown-attribute</a> <a href="#">unknown-attr-index</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-attribute</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **unknown-attr-index** *number*

<b>Description</b>	RIB attribute unknown attribute index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i> <a href="#">unknown-attributes</a> <a href="#">unknown-attribute</a> <a href="#">unknown-attr-index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **attr-len** *number*

<b>Description</b>	The length of the unknown path attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib</a> <a href="#">attr-sets</a> <a href="#">attr-set</a> <a href="#">index</a> <i>number</i> <a href="#">unknown-attributes</a> <a href="#">unknown-attribute</a> <a href="#">unknown-attr-index</a> <i>number</i> <a href="#">attr-len</a> <i>number</i>
<b>Tree</b>	<a href="#">attr-len</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **attr-type** *number*

<b>Description</b>	The type code of the unknown path attribute
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">unknown-attributes unknown-attribute unknown-attr-index</a> <i>number</i> <a href="#">attr-type</a> <i>number</i>
<b>Tree</b>	<a href="#">attr-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**extended** *boolean*

<b>Description</b>	Set to true if the unknown path attribute has the extended length flag is set to 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">unknown-attributes unknown-attribute unknown-attr-index</a> <i>number</i> <a href="#">extended</a> <i>boolean</i>
<b>Tree</b>	<a href="#">extended</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**optional** *boolean*

<b>Description</b>	Set to true if the unknown path attribute has the optional flag is set to 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">unknown-attributes unknown-attribute unknown-attr-index</a> <i>number</i> <a href="#">optional</a> <i>boolean</i>
<b>Tree</b>	<a href="#">optional</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**partial** *boolean*

<b>Description</b>	Set to true if the unknown path attribute has the partial flag is set to 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">unknown-attributes unknown-attribute unknown-attr-index</a> <i>number</i> <a href="#">partial</a> <i>boolean</i>
<b>Tree</b>	<a href="#">partial</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**transitive** *boolean*

<b>Description</b>	Set to true if the unknown path attribute has the transitive flag is set to 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bgp-rib attr-sets attr-set index</a> <i>number</i> <a href="#">unknown-attributes unknown-attribute unknown-attr-index</a> <i>number</i> <i>transitive boolean</i>
<b>Tree</b>	<a href="#">transitive</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**bridge-table**

<b>Description</b>	Enable the bridge-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discard-unknown-dest-mac** *boolean*

<b>Description</b>	Discard frames with unknown destination mac addresses. The source mac address of the discarded frame is learned as long as the mac is valid, mac-learning is enabled, and the number of entries has not reached the maximum-entries threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table discard-unknown-dest-mac</a> <i>boolean</i>
<b>Tree</b>	<a href="#">discard-unknown-dest-mac</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-duplication

<b>Description</b>	Configuration of the MAC duplication procedures.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table mac-duplication</a>
<b>Tree</b>	<a href="#">mac-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## action *keyword*

<b>Description</b>	Action to take on the subinterface (if action is use-net-instance-action) upon detecting at least one mac addresses as duplicate on the subinterface. In particular:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table mac-duplication action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">action</a>
<b>Default</b>	stop-learning
<b>Options</b>	<ul style="list-style-type: none"> <li>• stop-learning</li> <li>• blackhole</li> <li>• oper-down</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Configurable state of the mac-duplication procedures. Mac-duplication detects duplicate macs that move between different subinterfaces or a subinterface and an evpn destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table mac-duplication admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> </ul>

- disable

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-entries****Description**

Enter the duplicate-entries context

**Context**[network-instance name](#) *string* [bridge-table](#) [mac-duplication](#) [duplicate-entries](#)**Tree**[duplicate-entries](#)**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac address string****Description**

macs duplicate on the bridging instance

**Context**[network-instance name](#) *string* [bridge-table](#) [mac-duplication](#) [duplicate-entries](#) [mac address](#) *string***Tree**[mac](#)**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string****Description**

Enter the address context

**Context**[network-instance name](#) *string* [bridge-table](#) [mac-duplication](#) [duplicate-entries](#) [mac address](#) *string***Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination string**

<b>Description</b>	the name of the destination the duplicate mac is installed against in the fdb.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-duplication duplicate-entries mac address string</a> <a href="#">destination string</a>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-index number**

<b>Description</b>	A system-wide unique identifier of a subinterface object (system allocated).
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-duplication duplicate-entries mac address string</a> <a href="#">destination-index number</a>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-type keyword**

<b>Description</b>	the type of the destination the duplicate mac is installed against in the fdb.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-duplication duplicate-entries mac address string</a> <a href="#">destination-type keyword</a>
<b>Tree</b>	<a href="#">destination-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• sub-interface</li> <li>• blackhole</li> <li>• irb-interface</li> <li>• vxlan</li> <li>• reserved</li> <li>• evpn-mpls</li> <li>• connection-point</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dup-detect-time *string*

**Description** The date and time when the mac was declared duplicate

**Context** [network-instance name \*string\*](#) [bridge-table](#) [mac-duplication](#) [duplicate-entries](#) [mac address \*string\*](#) [dup-detect-time \*string\*](#)

**Tree** [dup-detect-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time-remaining (*keyword* | *number*)

**Description** remaining hold down time for duplicate mac

**Context** [network-instance name \*string\*](#) [bridge-table](#) [mac-duplication](#) [duplicate-entries](#) [mac address \*string\*](#) [hold-down-time-remaining \(\*keyword\* | \*number\*\)](#)

**Tree** [hold-down-time-remaining](#)

**Units** seconds

**Options**

- indefinite

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time (*keyword* | *number*)

**Description** Time to wait from the moment a mac is declared duplicate to the mac is flushed from the bridge table. When the duplicate mac is flushed, the monitoring process for the mac is restarted.

**Context** [network-instance name \*string\*](#) [bridge-table](#) [mac-duplication](#) [hold-down-time \(\*keyword\* | \*number\*\)](#)

**Tree** [hold-down-time](#)



<b>Range</b>	2 to 60
<b>Default</b>	9
<b>Units</b>	minutes
<b>Options</b>	• indefinite
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### monitoring-window *number*

<b>Description</b>	Monitoring window for detecting duplication on a given mac address. A mac is declared as duplicate if it exceeds the num-moves within the monitoring-window.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">monitoring-window</a> <i>number</i>
<b>Tree</b>	<a href="#">monitoring-window</a>
<b>Range</b>	1 to 15
<b>Default</b>	3
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-moves *number*

<b>Description</b>	Number of moves a mac is allowed within the monitoring-window, before it is declared duplicate.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">num-moves</a> <i>number</i>
<b>Tree</b>	<a href="#">num-moves</a>
<b>Range</b>	3 to 10
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,

7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-learning

<b>Description</b>	Enter the mac-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Configurable state of the learning procedures for dynamic mac addresses. If disabled, the existing macs in the bridge-table will be kept (and refreshed if new frames arrive for them) but no new mac addresses will be learned. Frames with unknown mac addresses are not dropped, unless discard-unknown-src-mac is configured.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aging

<b>Description</b>	Enter the aging context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">aging</a>
<b>Tree</b>	<a href="#">aging</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

**Description** Configurable state of the aging for the dynamic mac entries in the bridge table. If disabled, dynamically learned mac entries will be programmed in the bridge table until the network instance is disabled.

**Context** [network-instance name](#) *string* [bridge-table](#) [mac-learning](#) [aging](#) [admin-state](#) *keyword*

**Tree** [admin-state](#)

**Default** enable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **age-time** *number*

**Description** Configurable aging time for dynamically learned mac addresses

**Context** [network-instance name](#) *string* [bridge-table](#) [mac-learning](#) [aging](#) [age-time](#) *number*

**Tree** [age-time](#)

**Range** 60 to 86400

**Default** 300

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **learnt-entries**

**Description** Enter the learnt-entries context

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a>
<b>Tree</b>	<a href="#">learnt-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac** [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac</a> <a href="#">address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **aging** (*number* | *keyword*)

<b>Description</b>	remaining age time for learnt macs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac</a> <a href="#">address</a> <i>string</i> <a href="#">aging</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">aging</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination string**

<b>Description</b>	the name of the subinterface where the mac is learnt against.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-learning learnt-entries mac address string</a> <a href="#">destination string</a>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update string**

<b>Description</b>	The date and time of the last update of this learnt mac
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-learning learnt-entries mac address string</a> <a href="#">last-update string</a>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-relearn-only boolean**

<b>Description</b>	The value of this leaf indicates that network-instance will not learn any new mac addresses, but will relearn any that are already programmed
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">bridge-table mac-learning mac-relearn-only boolean</a>
<b>Tree</b>	<a href="#">mac-relearn-only</a>
<b>Default</b>	true
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-mac-learning** *keyword*

**Description** The operational state of mac-learning on this network instance.

**Context** [network-instance name](#) *string* [bridge-table](#) [mac-learning](#) [oper-mac-learning](#) *keyword*

**Tree** [oper-mac-learning](#)

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-mac-learning-disabled-reason** *keyword***Description**

The reason for the mac-learning being disabled on this network instance

**Context**

[network-instance name](#) *string* [bridge-table](#) [mac-learning](#) [oper-mac-learning-disabled-reason](#) *keyword*

**Tree**

[oper-mac-learning-disabled-reason](#)

**Options**

- admin-disabled

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-limit****Description**

Bridge Table size and thresholds.

**Context**

[network-instance name](#) *string* [bridge-table](#) [mac-limit](#)

**Tree**

[mac-limit](#)

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-entries** *number***Description**

Maximum number of mac addresses allowed in the bridge-table.

**Context**

[network-instance name](#) *string* [bridge-table](#) [mac-limit](#) [maximum-entries](#) *number*

<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Range</b>	1 to 250000
<b>Default</b>	250
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

<b>Description</b>	Percentage of the configured max-number-macs over which a warning is triggered. The warning message is cleared when the percentage drops below the configured percentage minus 5%
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-limit</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	6 to 100
<b>Default</b>	95
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-table

<b>Description</b>	Enter the mac-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a>
<b>Tree</b>	<a href="#">mac-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac *address string*

<b>Description</b>	macs learnt on the bridging instance
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination** *string*

<b>Description</b>	the name of the destination where the mac is programmed against.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">destination</a> <i>string</i>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-index** *number*

<b>Description</b>	A system-wide unique identifier of a subinterface object (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">destination-index</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,

7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D,  
7730 SXR-1x-44S

### **destination-type** *keyword*

<b>Description</b>	the type of the destination the mac installed against in the fdb.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">destination-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">destination-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• sub-interface</li> <li>• blackhole</li> <li>• irb-interface</li> <li>• vxlan</li> <li>• reserved</li> <li>• evpn-mpls</li> <li>• connection-point</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **failed-slots** *number*

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">failed-slots</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **is-protected** *boolean*

<b>Description</b>	Indicates if the mac is protected in the hardware.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">is-protected</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-protected</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-table</a> <a href="#">mac address</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**protect-anycast-gw-mac** *boolean*

<b>Description</b>	Protect anycast gateway mac's installed in the FDB, when this mac-vrf is part of an IRB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">protect-anycast-gw-mac</a> <i>boolean</i>
<b>Tree</b>	<a href="#">protect-anycast-gw-mac</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**proxy-arp**

<b>Description</b>	Enable the proxy-arp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a>
<b>Tree</b>	<a href="#">proxy-arp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configurable state of the layer-2 proxy ARP/ND table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-entries**

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** [ipv4-address](#) *string*

<b>Description</b>	List of duplicate proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-address *string*

<b>Description</b>	IPv4 address of the proxy ARP entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### detect-time *string*

<b>Description</b>	The date and time when the proxy entry was declared duplicate
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i> <a href="#">detect-time</a> <i>string</i>
<b>Tree</b>	<a href="#">detect-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time-remaining (*keyword* | *number*)

<b>Description</b>	Remaining hold down time for the duplicate proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i> <a href="#">hold-down-time-remaining</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">hold-down-time-remaining</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>indefinite</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i> <b>is-immutable</b> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i> <b>link-layer-address</b> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp duplicate-entries neighbor ipv4-address</a> <i>string</i> <b>state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dynamic-entries**

<b>Description</b>	Enter the dynamic-entries context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a>
<b>Tree</b>	<a href="#">dynamic-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** [ipv4-address](#) *string*

<b>Description</b>	List of dynamic proxy ARP entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-address** *string*

<b>Description</b>	IPv4 address of the proxy ARP entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **aging** (*number* | *keyword*)

<b>Description</b>	The remaining age time for learnt proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">aging</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">aging</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv4-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv4-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv4-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv4-address</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic-learning

<b>Description</b>	Enter the dynamic-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-learning</a>
<b>Tree</b>	<a href="#">dynamic-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Configurable state of the learning procedures for dynamic ARP/ND entries The dynamic ARP/ND entries are learned out of snooped GARP/ARP/ND messages on bridged sub-interfaces. These entries will be shown as dynamic, as opposed to EVPN entries or static entries. If the admin-state is disabled, the existing ARP/ND entries in the proxy table will be kept (and refreshed).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-learning</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## age-time (*keyword* | *number*)

<b>Description</b>	Aging timer value for the proxy entries When the aging expires, the entry is flushed.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-learning</a> <a href="#">age-time</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">age-time</a>
<b>Range</b>	60 to 86400
<b>Default</b>	never
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• never</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-refresh (*number* | *keyword*)

<b>Description</b>	<p>Configures the proxy refresh interval</p> <p>The interval determines the frequency at which the system generates three ARP Requests or Neighbor Solicitations with the intend to refresh the proxy entry. The refresh is sent within the age-time window.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic-learning</a> <a href="#">send-refresh</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">send-refresh</a>
<b>Range</b>	120 to 86400
<b>Default</b>	never
<b>Options</b>	<ul style="list-style-type: none"> <li>• never</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### evpn

<b>Description</b>	How proxy arp interacts with evpn
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flood**

<b>Description</b>	How ARP frames received on a proxy service are flooded into the EVPN network
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a> <a href="#">flood</a>
<b>Tree</b>	<a href="#">flood</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gratuitous-arp** *boolean*

<b>Description</b>	Whether to flood GARP requests or replies into EVPN
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a> <a href="#">flood</a> <a href="#">gratuitous-arp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">gratuitous-arp</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unknown-arp-req** *boolean*

<b>Description</b>	Whether to flood ARP requests (with source squelching) when there is no hit in the bridge-table-proxy-arp table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a> <a href="#">flood</a> <a href="#">unknown-arp-req</a> <i>boolean</i>
<b>Tree</b>	<a href="#">unknown-arp-req</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn</a> <a href="#">internal-tags</a> <a href="#">set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

### **evpn-entries**

<b>Description</b>	Enter the evpn-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a>
<b>Tree</b>	<a href="#">evpn-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** [ipv4-address](#) *string*

<b>Description</b>	List of EVPN proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-address** *string*

<b>Description</b>	IPv4 address of the proxy ARP entry
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <b>state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-duplication**

<b>Description</b>	Configuration of the proxy ARP/ND IP duplication procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <b>ip-duplication</b>
<b>Tree</b>	<a href="#">ip-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anti-spoof-mac** *string*

<b>Description</b>	MAC address associated with the optional anti-spoofing mechanism
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">ip-duplication</a> <b>anti-spoof-mac</b> <i>string</i>
<b>Tree</b>	<a href="#">anti-spoof-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hold-down-time** (*keyword* | *number*)

<b>Description</b>	Time to wait from the moment an IP is declared duplicate to the time the IP is removed from the proxy ARP/ND table
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When the duplicate IP is removed, the monitoring process for the IP address is restarted.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp ip-duplication hold-down-time</a> ( <i>keyword   number</i> )
<b>Tree</b>	<a href="#">hold-down-time</a>
<b>Range</b>	2 to 60
<b>Default</b>	9
<b>Units</b>	minutes
<b>Options</b>	<ul style="list-style-type: none"> <li>indefinite</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### monitoring-window *number*

<b>Description</b>	<p>Monitoring window for detecting duplication on a given ip address in the proxy ARP/ND table</p> <p>An IP is declared duplicate if it exceeds the num-moves within the monitoring-window.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp ip-duplication monitoring-window</a> <i>number</i>
<b>Tree</b>	<a href="#">monitoring-window</a>
<b>Range</b>	1 to 15
<b>Default</b>	3
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-moves *number*

<b>Description</b>	<p>Number of moves in the proxy ARP/ND table that an IP is allowed within the monitoring-window</p> <p>When the number of moves exceeds this value, the IP address is declared duplicate.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp ip-duplication num-moves</a> <i>number</i>
<b>Tree</b>	<a href="#">num-moves</a>



<b>Range</b>	3 to 10
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-blackhole** *boolean*

<b>Description</b>	Whether the anti-spoof MAC is programmed as a black hole static-mac in the mac-table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">ip-duplication</a> <a href="#">static-blackhole</a> <i>boolean</i>
<b>Tree</b>	<a href="#">static-blackhole</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason** *keyword*

<b>Description</b>	The reason the proxy-type is down on the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-down</li> <li>• no-mcid</li> <li>• tag-set-not-resolved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **process-arp-probes** *boolean*

<b>Description</b>	<p>Determines whether the router processes ARP probe messages.</p> <p>When set to true, ARP probe messages used by the hosts for Duplicate Address Detection are processed, replied if a proxy-arp entry is hit or reinjected into the data path. When set to false, ARP probe messages are flooded to the remote nodes if unknown-arp-requests are configured to be</p>
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flooded. ARP probe messages are identified as ARP Requests that use IP address 0.0.0.0 as sender's address.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">process-arp-probes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">process-arp-probes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## static-entries

<b>Description</b>	Enter the static-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">static-entries</a>
<b>Tree</b>	<a href="#">static-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [ipv4-address](#) *string*

<b>Description</b>	List of static proxy ARP entries that map an IPv4 address to a MAC address To configure a static proxy ARP entry a value must be written into this leaf, as well as the link-layer-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [ipv4-address](#) *string*

<b>Description</b>	IPv4 address resolved by the proxy ARP entry To configure a static neighbor entry a value must be written into this leaf, as well as the link-layer-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp static-entries neighbor ipv4-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp static-entries neighbor ipv4-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry To configure a static proxy entry a value must be written into this leaf and the ip-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp static-entries neighbor ipv4-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <b>state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of active proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy ARP entries.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a> <a href="#">in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-origin [origin](#) *keyword*

<b>Description</b>	The origin of the proxy entry installed in the table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-origin</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### origin *keyword*

<b>Description</b>	Enter the origin context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-entries *number*

<b>Description</b>	The total number of active proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i> <a href="#">in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pending-entries** *number*

<b>Description</b>	The total number of pending proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i> <a href="#">pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pending-entries** *number*

<b>Description</b>	The total number of pending proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp statistics pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**table-entries**

<b>Description</b>	Enter the table-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp table-entries</a>
<b>Tree</b>	<a href="#">table-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** [ipv4-address](#) *string*

<b>Description</b>	List of static and dynamic proxy ARP entries that map an IPv4 address to a MAC address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp table-entries neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-address** *string*

<b>Description</b>	IPv4 address resolved by the proxy ARP entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin** *keyword*

<b>Description</b>	The origin of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv4-address</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**table-size** *number*

<b>Description</b>	Maximum number of entries allowed in the proxy table of the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp table-size</a> <i>number</i>
<b>Tree</b>	<a href="#">table-size</a>
<b>Range</b>	1 to 8192
<b>Default</b>	250
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Debug trace-options for Proxy-ARP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flag** *name keyword*

<b>Description</b>	Tracing parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp trace-options flag name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-arp trace-options flag name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>request</li> </ul>

Trace all ARP request protocol packets snooped or generated for proxy-ARP

- reply

Trace all ARP reply protocol packets snooped or generated for proxy-ARP

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modifier** *keyword***Description**

Enter the modifier context

**Context**

[network-instance name](#) *string* [bridge-table](#) [proxy-arp](#) [trace-options](#) [flag name](#) *keyword* [modifier](#) *keyword*

**Tree**[modifier](#)**Options**

- detail
  - Enables detailed tracing
  - Includes both, received and sent packets.
- receive
  - Enables tracing for the received packets
- send
  - Enables tracing for the sent packets

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**proxy-nd****Description**

Enable the proxy-nd context

**Context**

[network-instance name](#) *string* [bridge-table](#) [proxy-nd](#)

**Tree**[proxy-nd](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configurable state of the layer-2 proxy ARP/ND table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-entries**

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** [ipv6-address](#) *string*

<b>Description</b>	List of duplicate proxy ND entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">duplicate-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-address** *string*

<b>Description</b>	IPv6 address of the proxy ND entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">duplicate-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detect-time** *string*

**Description** The date and time when the proxy entry was declared duplicate

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [duplicate-entries](#)  
[neighbor ipv6-address](#) *string* [detect-time](#) *string*

**Tree** [detect-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **evpn-override** *boolean*

**Description** The evpn-override property of the proxy entry

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [duplicate-entries](#)  
[neighbor ipv6-address](#) *string* [evpn-override](#) *boolean*

**Tree** [evpn-override](#)

**Default** false

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hold-down-time-remaining** (*keyword* | *number*)

**Description** Remaining hold down time for the duplicate proxy entry

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [duplicate-entries](#)  
[neighbor ipv6-address](#) *string* [hold-down-time-remaining](#) (*keyword* | *number*)

**Tree** [hold-down-time-remaining](#)

**Units** seconds

**Options**

- indefinite

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd duplicate-entries neighbor ipv6-address</a> <i>string</i> <b>is-immutable</b> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd duplicate-entries neighbor ipv6-address</a> <i>string</i> <b>link-layer-address</b> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd duplicate-entries neighbor ipv6-address</a> <i>string</i> <b>state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	The type of the neighbor entry
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">duplicate-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i> <i>type</i> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic-entries

<b>Description</b>	Enter the dynamic-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a>
<b>Tree</b>	<a href="#">dynamic-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [ipv6-address](#) *string*

<b>Description</b>	List of dynamic proxy ND entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [ipv6-address](#) *string*

<b>Description</b>	IPv6 address of the proxy ND entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**aging** (*number* | *keyword*)

<b>Description</b>	The remaining age time for learnt proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i> <b>aging</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">aging</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**evpn-override** *boolean*

<b>Description</b>	The evpn-override property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i> <b>evpn-override</b> <i>boolean</i>
<b>Tree</b>	<a href="#">evpn-override</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i> <b>is-immutable</b> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-entries neighbor ipv6-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-entries neighbor ipv6-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-entries neighbor ipv6-address</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *keyword*

<b>Description</b>	The type of the neighbor entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-entries neighbor ipv6-address</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic-learning

<b>Description</b>	Enter the dynamic-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-learning</a>
<b>Tree</b>	<a href="#">dynamic-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Configurable state of the learning procedures for dynamic ARP/ND entries The dynamic ARP/ND entries are learned out of snooped GARP/ARP/ND messages on bridged sub-interfaces. These entries will be shown as dynamic, as opposed to EVPN entries or static entries. If the admin-state is disabled, the existing ARP/ND entries in the proxy table will be kept (and refreshed).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd dynamic-learning admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## age-time (*keyword* | *number*)

<b>Description</b>	Aging timer value for the proxy entries When the aging expires, the entry is flushed.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-learning</a> <a href="#">age-time</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">age-time</a>
<b>Range</b>	60 to 86400
<b>Default</b>	never
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• never</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **send-refresh** (*number* | *keyword*)

<b>Description</b>	<p>Configures the proxy refresh interval</p> <p>The interval determines the frequency at which the system generates three ARP Requests or Neighbor Solicitations with the intend to refresh the proxy entry. The refresh is sent within the age-time window.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">dynamic-learning</a> <a href="#">send-refresh</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">send-refresh</a>
<b>Range</b>	120 to 86400
<b>Default</b>	never
<b>Options</b>	<ul style="list-style-type: none"> <li>• never</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **evpn**

<b>Description</b>	How proxy ARP/ND interacts with EVPN
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-neighbor-type** *keyword*

<b>Description</b>	Whether to advertise router entries or host entries into EVPN MAC/IP routes It also specifies whether to reply to Neighbor Solicitations for EVPN entries with the router flag set or unset.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn advertise-neighbor-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">advertise-neighbor-type</a>
<b>Default</b>	router
<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> <li>• router-host</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flood**

<b>Description</b>	How Neighbor Discovery frames received on a proxy service are flooded into the EVPN network
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn flood</a>
<b>Tree</b>	<a href="#">flood</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unknown-neighbor-advertise-host** *boolean*

<b>Description</b>	Whether to flood Neighbor Advertisement (NA) replies, for type host, into the EVPN network
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn flood unknown-neighbor-advertise-host</a> <i>boolean</i>
<b>Tree</b>	<a href="#">unknown-neighbor-advertise-host</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unknown-neighbor-advertise-router** *boolean*

<b>Description</b>	Whether to flood Neighbor Advertisement (NA) replies, for type router, into the EVPN network
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn flood unknown-neighbor-advertise-router</a> <i>boolean</i>
<b>Tree</b>	<a href="#">unknown-neighbor-advertise-router</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unknown-neighbor-solicitation** *boolean*

<b>Description</b>	Whether to flood Neighbor Solicitation (NS) messages (with source squelching) into the EVPN network
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn flood unknown-neighbor-solicitation</a> <i>boolean</i>
<b>Tree</b>	<a href="#">unknown-neighbor-solicitation</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn internal-tags set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>

<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

## evpn-entries

<b>Description</b>	Enter the evpn-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn-entries</a>
<b>Tree</b>	<a href="#">evpn-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [ipv6-address](#) *string*

<b>Description</b>	List of EVPN proxy ND entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn-entries neighbor ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [ipv6-address](#) *string*

<b>Description</b>	IPv6 address of the proxy ND entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn-entries neighbor ipv6-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## evpn-override *boolean*

<b>Description</b>	The evpn-override property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd evpn-entries neighbor ipv6-address</a> <i>string</i> <a href="#">evpn-override</a> <i>boolean</i>

<b>Tree</b>	<a href="#">evpn-override</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-immutable** *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <b>state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	The type of the neighbor entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">evpn-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <b>type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-duplication**

<b>Description</b>	Configuration of the proxy ARP/ND IP duplication procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <b>ip-duplication</b>
<b>Tree</b>	<a href="#">ip-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anti-spoof-mac** *string*

<b>Description</b>	MAC address associated with the optional anti-spoofing mechanism
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">ip-duplication</a> <a href="#">anti-spoof-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">anti-spoof-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time (*keyword* | *number*)

<b>Description</b>	Time to wait from the moment an IP is declared duplicate to the time the IP is removed from the proxy ARP/ND table  When the duplicate IP is removed, the monitoring process for the IP address is restarted.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">ip-duplication</a> <a href="#">hold-down-time</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">hold-down-time</a>
<b>Range</b>	2 to 60
<b>Default</b>	9
<b>Units</b>	minutes
<b>Options</b>	<ul style="list-style-type: none"> <li>indefinite</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### monitoring-window *number*

<b>Description</b>	Monitoring window for detecting duplication on a given ip address in the proxy ARP/ND table  An IP is declared duplicate if it exceeds the num-moves within the monitoring-window.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">ip-duplication</a> <a href="#">monitoring-window</a> <i>number</i>
<b>Tree</b>	<a href="#">monitoring-window</a>
<b>Range</b>	1 to 15
<b>Default</b>	3
<b>Units</b>	minutes
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-moves *number*

**Description** Number of moves in the proxy ARP/ND table that an IP is allowed within the monitoring-window  
When the number of moves exceeds this value, the IP address is declared duplicate.

**Context** [network-instance name](#) *string* [bridge-table proxy-nd ip-duplication num-moves](#) *number*

**Tree** [num-moves](#)

**Range** 3 to 10

**Default** 5

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### static-blackhole *boolean*

**Description** Whether the anti-spoof MAC is programmed as a black hole static-mac in the mac-table

**Context** [network-instance name](#) *string* [bridge-table proxy-nd ip-duplication static-blackhole](#) *boolean*

**Tree** [static-blackhole](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-down-reason *keyword*

**Description** The reason the proxy-type is down on the network-instance

**Context** [network-instance name](#) *string* [bridge-table proxy-nd oper-down-reason](#) *keyword*

**Tree** [oper-down-reason](#)

**Options**

- admin-down
- no-mcid

- tag-set-not-resolved

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### process-dad-neighbor-solicitations *boolean*

<b>Description</b>	Determines whether the router processes Neighbor Solicitation DAD messages  When set to true, Neighbor Solicitation DAD messages used by the hosts for Duplicate Address Detection are processed, replied if a proxy ND entry is hit, or reinjected into the data path. When set to false, Neighbor Solicitation DAD messages are flooded to the remote nodes if unknown-neighbor-solicitation is configured so that unknown Neighbor Solicitation messages are flooded.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">process-dad-neighbor-solicitations</a> <i>boolean</i>
<b>Tree</b>	<a href="#">process-dad-neighbor-solicitations</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### static-entries

<b>Description</b>	Enter the static-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a>
<b>Tree</b>	<a href="#">static-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor [ipv6-address](#) *string*

<b>Description</b>	List of static proxy ND entries that map an IPv6 address to a MAC address  To configure a static proxy ND entry a value must be written into this leaf, as well as the link-layer-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-address *string*

<b>Description</b>	IPv6 address resolved by the proxy ND entry To configure a static neighbor entry a value must be written into this leaf, as well as the link-layer-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### evpn-override *boolean*

<b>Description</b>	The evpn-override property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">evpn-override</a> <i>boolean</i>
<b>Tree</b>	<a href="#">evpn-override</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### is-immutable *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry To configure a static proxy entry a value must be written into this leaf and the ip-address leaf.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	The type of the neighbor entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">static-entries</a> <a href="#">neighbor ipv6-address</a> <i>string</i> <b>type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	router
<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <b>statistics</b>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of active proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">statistics</a> <b>active-entries</b> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy ARP entries.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">statistics</a> <a href="#">in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-origin [origin](#) *keyword*

<b>Description</b>	The origin of the proxy entry installed in the table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-origin</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### origin *keyword*

<b>Description</b>	Enter the origin context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-entries *number*

<b>Description</b>	The total number of active proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">statistics</a> <a href="#">neighbor-origin</a> <a href="#">origin</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd statistics</a> <a href="#">neighbor-origin origin</a> <i>keyword</i> <a href="#">in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pending-entries** *number*

<b>Description</b>	The total number of pending proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd statistics</a> <a href="#">neighbor-origin origin</a> <i>keyword</i> <a href="#">pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd statistics</a> <a href="#">neighbor-origin origin</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**pending-entries** *number*

<b>Description</b>	The total number of pending proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd statistics pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of proxy ARP entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**table-entries**

<b>Description</b>	Enter the table-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd table-entries</a>
<b>Tree</b>	<a href="#">table-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** [ipv6-address](#) *string*

<b>Description</b>	List of proxy ND entries that map an IPv6 address to a MAC address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table proxy-nd table-entries neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-address *string*

<b>Description</b>	IPv6 address resolved by the proxy ND entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### evpn-override *boolean*

<b>Description</b>	The evpn-override property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">evpn-override</a> <i>boolean</i>
<b>Tree</b>	<a href="#">evpn-override</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### is-immutable *boolean*

<b>Description</b>	The immutable property of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">is-immutable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-immutable</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-update *string*

<b>Description</b>	The date and time of the last update of this proxy entry
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-layer-address** *string*

<b>Description</b>	The resolving MAC address of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">link-layer-address</a> <i>string</i>
<b>Tree</b>	<a href="#">link-layer-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**origin** *keyword*

<b>Description</b>	The origin of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	The state of the proxy entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• in-active</li> <li>• pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	The type of the neighbor entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <a href="#">table-entries</a> <a href="#">neighbor</a> <a href="#">ipv6-address</a> <i>string</i> <b>type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• router</li> <li>• host</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**table-size** *number*

<b>Description</b>	Maximum number of entries allowed in the proxy table of the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <b>table-size</b> <i>number</i>
<b>Tree</b>	<a href="#">table-size</a>
<b>Range</b>	1 to 8192
<b>Default</b>	250
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Debug traceoptions for Proxy-ARP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-nd</a> <b>trace-options</b>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flag** *name keyword*

**Description** Tracing parameters

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [trace-options](#) [flag name](#) *keyword*

**Tree** [flag](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *keyword*

**Description** Enter the name context

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [trace-options](#) [flag name](#) *keyword*

**Options**

- solicitation  
Trace all Neighbor Solicitation packets snooped or generated for proxy ND
- advertisement  
Trace all Neighbor Advertisement packets snooped or generated for proxy ND

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **modifier** *keyword*

**Description** Enter the modifier context

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [trace-options](#) [flag name](#) *keyword* [modifier](#) *keyword*

**Tree** [modifier](#)

**Options**

- detail  
To enable detailed tracing, including both received and sent packets
- receive  
To enable tracing for the received packets

- send  
To enable tracing for the sent packets

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## reserved-macs

<b>Description</b>	Enter the reserved-macs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table reserved-macs</a>
<b>Tree</b>	<a href="#">reserved-macs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac [address string](#)

<b>Description</b>	reserved macs on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table reserved-macs mac address string</a>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table reserved-macs mac address string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**users** *application string*

<b>Description</b>	applications reserving this mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table reserved-macs mac address</a> <i>string</i> <a href="#">users application</a> <i>string</i>
<b>Tree</b>	<a href="#">users</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**application** *string*

<b>Description</b>	Enter the application context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table reserved-macs mac address</a> <i>string</i> <a href="#">users application</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**split-horizon-group** *name string*

<b>Description</b>	List of split-horizon-groups created in the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table split-horizon-group name</a> <i>string</i>
<b>Tree</b>	<a href="#">split-horizon-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	8

**name** *string*

<b>Description</b>	Split-horizon-group created in the network-instance
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Multiple split-horizon-groups can be configured within the same network-instance of type mac-vrf. Only objects associated to different split-horizon-groups can forward packets among each other.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table split-horizon-group name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## static-mac

<b>Description</b>	Enter the static-mac context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table static-mac</a>
<b>Tree</b>	<a href="#">static-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac address *string*

<b>Description</b>	static macs configured on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table static-mac mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table static-mac mac address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,



7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D,  
7730 SXR-1x-44S

### **destination** (*keyword* | *subinterface-all* | *name*)

<b>Description</b>	The destination against which the mac is programmed  This parameter is mandatory and may be configured as a subinterface, a blackhole or a connection-point. When a connection-point is configured as destination, the name of the connection-point is given as input, as follows: 'destination <name>'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table static-mac mac address</a> <i>string</i> <a href="#">destination</a> ( <i>keyword</i>   <i>subinterface-all</i>   <i>name</i> )
<b>Tree</b>	<a href="#">destination</a>
<b>String Length</b>	5 to 25
<b>Options</b>	<ul style="list-style-type: none"> <li>• blackhole</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **active-entries** *number*

<b>Description</b>	The total number of entries that are active in the mac-table.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-entries *number*

**Description** The total number of macs, which have not been programmed on atleast one slot

**Context** [network-instance name](#) *string* [bridge-table statistics failed-entries](#) *number*

**Tree** [failed-entries](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-type *type keyword*

**Description** the type of the mac installed in the fib.

**Context** [network-instance name](#) *string* [bridge-table statistics mac-type](#) *type keyword*

**Tree** [mac-type](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### type *keyword*

**Description** Enter the type context

**Context** [network-instance name](#) *string* [bridge-table statistics mac-type](#) *type keyword*

**Options**

- static
- duplicate
- learnt
- irb-interface
- evpn
- evpn-static

- irb-interface-anycast
- proxy-anti-spoof
- reserved
- eth-cfm
- irb-interface-vrrp

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number***Description**

The total number of entries of this type that are active in the mac-table.

**Context**

[network-instance name](#) *string* [bridge-table statistics mac-type type](#) *keyword*  
[active-entries](#) *number*

**Tree**[active-entries](#)**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number***Description**

The total number of macs of this type, which have not been programmed on atleast one slot

**Context**

[network-instance name](#) *string* [bridge-table statistics mac-type type](#) *keyword*  
[failed-entries](#) *number*

**Tree**[failed-entries](#)**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, that are present in the mac-table.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">statistics</a> <a href="#">mac-type</a> <a href="#">type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, that are present in the mac-table.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">statistics</a> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tldp-mac-flush**

<b>Description</b>	Targeted Label Distribution Protocol MAC Flush parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">tldp-mac-flush</a>
<b>Tree</b>	<a href="#">tldp-mac-flush</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-flush-on-failure** *boolean*

<b>Description</b>	Triggers a MAC address flush-all-from-me indication to the TLDP peers upon failure
--------------------	--

This command enables sending out flush-all-from-me messages to all Targeted LDP peers included in the MAC-VRF, in the event of a failure of at least one MAC-VRF subinterface or a pseudowire or the BGP EVPN destinations. This feature provides an LDP-based mechanism for recovering a link failure in a dual-homed connection to a MAC-VRF.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">tldp-mac-flush</a> <a href="#">send-flush-on-failure</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send-flush-on-failure</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### connection-point [name](#) *string*

<b>Description</b>	Connection-point information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i>
<b>Tree</b>	<a href="#">connection-point</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	255

### [name](#) *string*

<b>Description</b>	A unique name identifying the connection-point
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i>
<b>String Length</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### bridge-table

<b>Description</b>	Enable the Bridge Table on the connection-point and configure associated parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,

7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D,  
7730 SXR-1x-44S

### **discard-unknown-src-mac** *boolean*

<b>Description</b>	Discard frames with unknown source mac addresses  The source mac address of the discarded frame is never learned when this command is enabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table discard-unknown-src-mac</a> <i>boolean</i>
<b>Tree</b>	<a href="#">discard-unknown-src-mac</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac-duplication**

<b>Description</b>	Enter the mac-duplication context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication</a>
<b>Tree</b>	<a href="#">mac-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **action** *keyword*

<b>Description</b>	Action to take on all the subinterfaces or pseudowires of the connection-point upon detecting at least one mac addresses as duplicate  In particular:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">action</a>
<b>Default</b>	use-net-instance-action

<b>Options</b>	<ul style="list-style-type: none"> <li>• use-net-instance-action</li> <li>• stop-learning</li> <li>• blackhole</li> <li>• oper-down</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## duplicate-entries

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac [address](#) *string*

<b>Description</b>	macs duplicate on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dup-detect-time *string*

<b>Description</b>	The date and time when the mac was declared duplicate
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i> <a href="#">dup-detect-time</a> <i>string</i>
<b>Tree</b>	<a href="#">dup-detect-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-time-remaining (*keyword* | *number*)

<b>Description</b>	remaining hold down time for duplicate mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i> <a href="#">hold-down-time-remaining</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">hold-down-time-remaining</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>indefinite</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-learning

<b>Description</b>	Enter the mac-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning</a>



<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Configurable state of the learning procedures for dynamic mac addresses If disabled, the existing macs in the bridge-table will be kept (and refreshed if new frames arrive for them) but no new mac addresses will be learned. Frames with unknown mac addresses are not dropped, unless discard-unknown-src-mac is configured.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### aging

<b>Description</b>	Enter the aging context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning aging</a>
<b>Tree</b>	<a href="#">aging</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configurable state of the aging for the dynamic mac entries in the bridge table  If disabled, dynamically learned mac entries will be programmed in the bridge table until the network instance is disabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning aging admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**learnt-entries**

<b>Description</b>	Enter the learnt-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning learnt-entries</a>
<b>Tree</b>	<a href="#">learnt-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac** [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning learnt-entries mac</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e,

7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### aging (*number* | *keyword*)

<b>Description</b>	remaining age time for learnt macs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">aging</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">aging</a>
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-update *string*

<b>Description</b>	The date and time of the last update of this learnt mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-limit**

<b>Description</b>	Bridge Table size and thresholds
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-limit</a>
<b>Tree</b>	<a href="#">mac-limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-entries** *number*

<b>Description</b>	Maximum number of mac addresses allowed in the bridge-table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-limit maximum-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Range</b>	1 to 8192
<b>Default</b>	250
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**warning-threshold-pct** *number*

<b>Description</b>	Percentage of the configured max-number-macs over which a warning is triggered  The warning message is cleared when the percentage drops below the configured percentage minus 5%
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-limit warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	6 to 100
<b>Default</b>	95
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-table

**Description** Enter the mac-table context

**Context** [network-instance name](#) *string* [connection-point name](#) *string* [bridge-table mac-table](#)

**Tree** [mac-table](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac [address](#) *string*

**Description** macs learnt on the bridging instance

**Context** [network-instance name](#) *string* [connection-point name](#) *string* [bridge-table mac-table mac address](#) *string*

**Tree** [mac](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

**Description** Enter the address context

**Context** [network-instance name](#) *string* [connection-point name](#) *string* [bridge-table mac-table mac address](#) *string*

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-slots** *number*

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <b>failed-slots</b> <i>number</i>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <b>last-update</b> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-table mac address</a> <i>string</i> <b>not-programmed-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## type keyword

**Description** the type of the mac installed in the fib.

**Context** [network-instance name](#) *string* [connection-point name](#) *string* [bridge-table mac-table](#) [mac address](#) *string* **type** *keyword*

**Tree** [type](#)

**Options**

- static
- duplicate
- learnt
- irb-interface
- evpn
- evpn-static
- irb-interface-anycast
- proxy-anti-spoof
- reserved
- eth-cfm
- irb-interface-vrrp

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [connection-point name](#) *string* [bridge-table statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of entries that are active on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on at least one slot
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-type** *type keyword*

<b>Description</b>	the type of the mac on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics mac-type</a> <i>type keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics</a> <a href="#">mac-type</a> <i>type</i> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics</a> <a href="#">mac-type</a> <i>type</i> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	network instance allocated connection-point index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason keyword**

<b>Description</b>	The reason for the connection-point being down in the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-dup-detected</li> <li>• associations-oper-down</li> <li>• no-associations</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	The operational state of this connection-point.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting</li> </ul>

- Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pseudowire** *name string*

<b>Description</b>	Pseudowire that can be used for this connection point Multiple pseudowires can be configured within the same connection point. The active pseudowire is selected based on the precedence that it is configured with the endpoint.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">connection-point name string</a> <a href="#">pseudowire name string</a>
<b>Tree</b>	<a href="#">pseudowire</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name** *string*

<b>Description</b>	The identifier for the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	The configured, desired state of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-word** *boolean*

<b>Description</b>	<p>Whether control word is enabled for the pseudowire</p> <p>If set to true, the router signals the support of the control word for the pseudowires. If the remote peer signals support for the control word too, the router pushes the control word immediately below the vc label (or the flow-label if enabled).</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-index** *number*

<b>Description</b>	A system-wide unique identifier of a pseudowire object (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">destination-index</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-label** *boolean*

<b>Description</b>	Whether the flow aware transport (FAT) label is enabled for the pseudowire. If set to true, the router signals the support of the FAT label for the pseudowire. If the remote peer signals support for the FAT label too, the router pushes the FAT label immediately below the vc label.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">flow-label</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-label</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-label-oper-state** *keyword*

<b>Description</b>	Operational state of the flow label on the pseudowire The state depends on the local configuration of flow-label and the R flag signaled by the peer. When set to down, the flow-aware transport label is not used irrespective of the local configuration of the flow-label.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">flow-label-oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flow-label-oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading</li> </ul>

- Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number****Description**

Network instance allocated pseudowire index

**Context**[network-instance name](#) *string* [connection-point name](#) *string* [pseudowire name](#) *string* [index number](#)**Tree**[index](#)**Default**

0

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-change** *string*

<b>Description</b>	The date and time of the most recent change to the pseudowire state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**local**

<b>Description</b>	The local parameters of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">local</a>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-ingress-vc-label** *number*

<b>Description</b>	The value of the operational ingress vc label The ingress virtual circuit mpls label is allocated by the system when the signaling is of type TLDP or configured if the signaling is static.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">local</a> <a href="#">operational-ingress-vc-label</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-ingress-vc-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pseudowire-status** *keyword*

<b>Description</b>	Indicates a local fault in the pseudowire The bits are signaled in the pseudowire status bits TLV of the TLDP messages to the peer.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">local pseudowire-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pseudowire-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">pseudowire-forwarding</a></li> <li>• <a href="#">pseudowire-not-forwarding</a></li> <li>• <a href="#">local-attachment-circuit-ingress-fault</a></li> <li>• <a href="#">local-attachment-circuit-egress-fault</a></li> <li>• <a href="#">provider-service-network-ingress-fault</a></li> <li>• <a href="#">provider-service-network-egress-fault</a></li> <li>• <a href="#">pseudowire-forwarding-standby</a></li> <li>• <a href="#">pseudowire-request-switchover</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason** *keyword*

<b>Description</b>	The reason for the pseudowire being oper down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">admin-disabled</a></li> <li>• <a href="#">network-instance-oper-down</a></li> <li>• <a href="#">no-ingress-vc-label</a></li> <li>• <a href="#">no-egress-vc-label</a></li> <li>• <a href="#">network-instance-mtu-mismatch</a></li> <li>• <a href="#">remote-system-fault-status-bits</a></li> <li>• <a href="#">evpn-route-conflict</a></li> <li>• <a href="#">transport-tunnel-oper-down</a></li> <li>• <a href="#">no-destination-id</a></li> <li>• <a href="#">connection-point-dup-detect</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	The operational state of the pseudowire
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<b>Context</b>	<code>network-instance name string connection-point name string pseudowire name string oper-state keyword</code>
<b>Tree</b>	<code>oper-state</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>up</code> Component or process is operational</li> <li>• <code>down</code> Component or process is not operational</li> <li>• <code>empty</code> Component slot is empty</li> <li>• <code>downloading</code> Component is downloading image into memory</li> <li>• <code>booting</code> Component is booting downloaded image</li> <li>• <code>starting</code> Component image operational, application processes starting</li> <li>• <code>failed</code> Component or process has failed</li> <li>• <code>synchronizing</code> Component is currently being synchronized</li> <li>• <code>upgrading</code> Component is currently being upgraded</li> <li>• <code>low-power</code> Component is offline due to insufficient system power</li> <li>• <code>degraded</code> Component or process is in a degraded state</li> <li>• <code>warm-reboot</code> Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• <code>waiting</code> Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pw-tunnel** *reference*

<b>Description</b>	The tunnel over which the pseudowire is transported
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">pw-tunnel reference</a>
<b>Tree</b>	<a href="#">pw-tunnel</a>
<b>Reference</b>	<a href="#">tunnel pseudowire-tunnel tunnel name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote**

<b>Description</b>	The remote parameters of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">remote</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-egress-vc-label** *number*

<b>Description</b>	The value of the operational egress vc label The egress virtual circuit mpls label is received via TLDP when the signaling is of type TLDP or configured if the signaling is static.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">remote operational-egress-vc-label</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-egress-vc-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pseudowire-status** *keyword*

<b>Description</b>	Indicates a peer fault in the pseudowire The bits are received in the pseudowire status bits TLV of the TLDP messages from the peer.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">remote pseudowire-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pseudowire-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">pseudowire-forwarding</a></li> <li>• <a href="#">pseudowire-not-forwarding</a></li> <li>• <a href="#">local-attachment-circuit-ingress-fault</a></li> <li>• <a href="#">local-attachment-circuit-egress-fault</a></li> <li>• <a href="#">provider-service-network-ingress-fault</a></li> <li>• <a href="#">provider-service-network-egress-fault</a></li> <li>• <a href="#">pseudowire-forwarding-standby</a></li> <li>• <a href="#">pseudowire-request-switchover</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## signaling

<b>Description</b>	Signaling configuration for the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling</a>
<b>Tree</b>	<a href="#">signaling</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## static

<b>Description</b>	Static pseudowire parameters The virtual circuit labels are configured on both ends of the pseudowire.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling</a> <a href="#">static</a>
<b>Tree</b>	<a href="#">static</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## egress-vc-label *number*

<b>Description</b>	The value of the configured egress vc label
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The egress virtual circuit mpls label is allocated by the system when the endpoint signaling is of type TLDP or configured in this case since the signaling is static.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling static</a> <a href="#">egress-vc-label</a> <i>number</i>
<b>Tree</b>	<a href="#">egress-vc-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ingress-vc-label** *number*

<b>Description</b>	The value of the configured ingress vc label The ingress virtual circuit mpls label is configured if the pseudowire signaling is static.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling static</a> <a href="#">ingress-vc-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-vc-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tldp**

<b>Description</b>	Targeted Label Distribution Protocol pseudowire signaling parameters When the network instance is of type vpws, the use of TLDP is specified in RFC4447. When the network instance is of type mac-vrf, the use of TLDP is specified in RFC4762.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling tldp</a>
<b>Tree</b>	<a href="#">tldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **advertise-l2-mtu** *number*

<b>Description</b>	Layer-2 MTU advertised to the remote peer in bytes.
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The default value signaled for a pseudowire is taken from the oper-mac-vrf-mtu (in case of a mac-vrf) or from the oper-vpws-mtu (in case of a vpws) parameters. However, that default value is overridden by the value configured with this command.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling tldp advertise-l2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">advertise-l2-mtu</a>
<b>Range</b>	1450 to 9500
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ignore-mtu-mismatch** *boolean*

<b>Description</b>	Whether the received signaled Layer-2 MTU is ignored  In case the local advertised l2-mtu and the received remote l2-mtu do not match the pseudowire will be kept operationally down if this command is set to false. When set to true, the received l2-mtu is ignored and the pseudowire can be operationally up even if the local and remote l2-mtu values do not match.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling tldp ignore-mtu-mismatch</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-mtu-mismatch</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **virtual-circuit-type** *keyword*

<b>Description</b>	The virtual circuit (VC) type of the pseudowire  When set to vlan, the router signals vc-type 'vlan' and pushes vlan tag in the inner frame when sending frames over the pseudowire.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling tldp virtual-circuit-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">virtual-circuit-type</a>
<b>Default</b>	ethernet
<b>Options</b>	<ul style="list-style-type: none"> <li>ethernet</li> <li>vlan</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### virtual-circuit-identifier *number*

<b>Description</b>	The virtual circuit identifier of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">pseudowire name</a> <i>string</i> <a href="#">signaling virtual-circuit-identifier</a> <i>number</i>
<b>Tree</b>	<a href="#">virtual-circuit-identifier</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	A user-entered description of this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### icmp

<b>Description</b>	Enter the icmp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp</a>
<b>Tree</b>	<a href="#">icmp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	ICMP version 4 statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **last-clear** *string*

**Description** Timestamp of the last time the interface counters were cleared.

**Context** [network-instance name](#) *string* [icmp statistics last-clear](#) *string*

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### **total**

**Description** Aggregate statistics, counting all ICMP message types

**Context** [network-instance name](#) *string* [icmp statistics total](#)

**Tree** [total](#)

**Configurable** False

**Platforms** Supported on all platforms

### **in-error-packets** *number*

**Description** The number of ICMPv4 messages that the network instance received and extracted successfully to the CPM but when they arrived they were determined to have ICMP-specific errors (bad ICMP checksums, bad length, etc.)

**Context** [network-instance name](#) *string* [icmp statistics total in-error-packets](#) *number*

**Tree** [in-error-packets](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **in-packets** *number*

**Description** The total number of ICMPv4 messages that the network instance received and extracted successfully to the CPM. Note that this counter includes all those counted by in-error-packets.

**Context** [network-instance name](#) *string* [icmp statistics total in-packets](#) *number*



<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-error-packets** *number*

<b>Description</b>	The number of ICMPv4 messages that could not be sent from this network instance due to issues such as 'no route to the source' or 'fragmentation required but not supported'
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics total out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-packets** *number*

<b>Description</b>	The total number of ICMPv4 messages that the network instance attempted to send. Note that this counter includes all those counted by out-error-packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics total out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **type name** *keyword*

<b>Description</b>	Enter the type list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics type name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics type name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• echo-reply</li> <li>• dest-unreachable</li> <li>• redirect</li> <li>• echo</li> <li>• rtr-advertisement</li> <li>• rtr-selection</li> <li>• time-exceeded</li> <li>• param-problem</li> <li>• timestamp</li> <li>• timestamp-reply</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-packets** *number*

<b>Description</b>	The total number of ICMPv4 messages of this type that the network instance received and extracted successfully to the CPM.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics type name</a> <i>keyword</i> <a href="#">in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-error-packets** *number*

<b>Description</b>	The number of ICMPv4 messages of this type that could not be sent from this network instance due to issues such as 'no route to the source' or 'fragmentation required but not supported'
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics type name</a> <i>keyword</i> <a href="#">out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-packets** *number*

<b>Description</b>	The total number of ICMPv4 messages of this type that the network instance attempted to send.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics type name</a> <i>keyword</i> <a href="#">out-packets number</a>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**icmp6**

<b>Description</b>	Enter the icmp6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6</a>
<b>Tree</b>	<a href="#">icmp6</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	ICMP version 6 statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the interface counters were cleared.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total**

<b>Description</b>	Aggregate statistics, counting all ICMP message types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics total</a>
<b>Tree</b>	<a href="#">total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-error-packets** *number*

<b>Description</b>	The number of ICMPv6 messages that the network instance received and extracted successfully to the CPM but when they arrived they were determined to have ICMP-specific errors (bad ICMP checksums, bad length, etc.)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics total in-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-packets** *number*

<b>Description</b>	The total number of ICMPv6 messages that the network instance received and extracted successfully to the CPM. Note that this counter includes all those counted by in-error-packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics total in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-error-packets** *number*

<b>Description</b>	The number of ICMPv6 messages that could not be sent from this network instance due to issues such as 'no route to the source'
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics total out-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-packets** *number*

<b>Description</b>	The total number of ICMPv6 messages that the network instance attempted to send. Note that this counter includes all those counted by out-error-packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics total out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **type name** *keyword*

<b>Description</b>	Enter the type list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics type name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **name** *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics type name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• dest-unreachable</li> <li>• packet-too-big</li> <li>• time-exceeded</li> <li>• param-problem</li> <li>• echo-request</li> <li>• echo-reply</li> <li>• rtr-solicitation</li> </ul>

- rtr-advertisement
- nbr-solicitation
- nbr-advertisement
- redirect

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-packets** *number*

<b>Description</b>	The total number of ICMPv6 messages of this type that the network instance received and extracted successfully to the CPM.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics type name</a> <i>keyword</i> <a href="#">in-packets number</a>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-error-packets** *number*

<b>Description</b>	The number of ICMPv6 messages of this type that could not be sent from this network instance due to issues such as 'no route to the source'
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics type name</a> <i>keyword</i> <a href="#">out-error-packets number</a>
<b>Tree</b>	<a href="#">out-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-packets** *number*

<b>Description</b>	The total number of ICMPv6 messages of this type that the network instance attempted to send.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics type name</a> <i>keyword</i> <a href="#">out-packets number</a>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## inter-instance-policies

<b>Description</b>	Policies for leaking routes between this network instance and other network instances
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">inter-instance-policies</a>
<b>Tree</b>	<a href="#">inter-instance-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## apply-policy

<b>Description</b>	Container for specifying route leaking import and export policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">inter-instance-policies</a> <a href="#">apply-policy</a>
<b>Tree</b>	<a href="#">apply-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## export-policy *reference*

<b>Description</b>	Policy used to specify the routes of this NI that should be made available for leaking to other NIs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">inter-instance-policies</a> <a href="#">apply-policy</a> <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy</a> <i>policy name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**import-policy** *reference*

<b>Description</b>	Policy used to specify the routes leaked by other NIs that should be imported into this NI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">inter-instance-policies</a> <a href="#">apply-policy</a> <a href="#">import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy</a> <i>policy name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *name string*

<b>Description</b>	List of subinterfaces used by this network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the subinterface bound to this network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bridge-table**

<b>Description</b>	Enable the bridge-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-relearn-only *boolean*

**Description** The value of this leaf indicates that the interface will not learn any new mac addresses, but will relearn any that are already programmed

**Context** [network-instance name](#) *string* [interface name](#) *string* [bridge-table mac-relearn-only](#) *boolean*

**Tree** [mac-relearn-only](#)

**Default** true

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multicast-forwarding *keyword*

**Description** The type of multicast data forwarded by this subinterface.

**Context** [network-instance name](#) *string* [interface name](#) *string* [bridge-table multicast-forwarding](#) *keyword*

**Tree** [multicast-forwarding](#)

**Options**

- none
- BUM
- unknown-unicast
- broadcast-mcast

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-mac-learning *keyword*

**Description** The operational state of mac-learning on this subinterface.

**Context** [network-instance name](#) *string* [interface name](#) *string* [bridge-table oper-mac-learning](#) *keyword*

<b>Tree</b>	<a href="#">oper-mac-learning</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-mac-learning-disabled-reason** *keyword*

<b>Description</b>	The reason for the mac-learning being disabled on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">oper-mac-learning-disabled-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-mac-learning-disabled-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-disabled</li> <li>• mac-dup-detected</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**connection-point** *reference*

<b>Description</b>	Enter the connection-point context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">connection-point</a> <i>reference</i>
<b>Tree</b>	<a href="#">connection-point</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	network instance allocated sub interface index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">index</a> <i>number</i>
<b>Tree</b>	<a href="#">index</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**interface-ref**

<b>Description</b>	Reference to a subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">interface-ref</a>

<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface reference**

<b>Description</b>	Reference to a base interface, for example a port or LAG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">interface-ref</a> <a href="#">interface reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subinterface reference**

<b>Description</b>	Reference to a subinterface This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">interface-ref</a> <a href="#">subinterface reference</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason keyword**

<b>Description</b>	The reason for the interface being down in the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <a href="#">oper-down-reason</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• ip-addr-missing</li> <li>• ip-addr-overlap</li> <li>• subif-down</li> <li>• net-inst-down</li> <li>• vrf-type-mismatch</li> <li>• mac-dup-detected</li> <li>• associated-mac-vrf-down</li> <li>• mac-vrf-association-missing</li> <li>• ip-vrf-association-missing</li> <li>• associated-ip-vrf-down</li> <li>• evpn-mh-standby</li> <li>• interface-ref-missing</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	The operational state of this subinterface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">interface name</a> <i>string</i> <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> </ul>

- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

## ip-forwarding

**Description**

Forwarding options that apply to the entire network instance.

**Context**[network-instance name](#) *string* [ip-forwarding](#)**Tree**[ip-forwarding](#)**Configurable**

True

**Platforms**

Supported on all platforms

## last-resort-lookup

**Description**

Enter the last-resort-lookup context

**Context**[network-instance name](#) *string* [ip-forwarding](#) [last-resort-lookup](#)**Tree**[last-resort-lookup](#)**Configurable**

True

**Platforms**

Supported on all platforms

**network-instance** *reference*

<b>Description</b>	A reference to another network-instance in which the system will try to find a matching IP route if this network instance does not have any route to the destination IP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-forwarding</a> <a href="#">last-resort-lookup</a> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**receive-ipv4-check** *boolean*

<b>Description</b>	If set to true then the following check is done on every subinterface of the network-instance: if an IPv4 packet is received on a subinterface and the IPv4 oper-status of this subinterface is down the packet is discarded. If this leaf is set to false then received IPv4 packets are accepted on all subinterfaces of the network-instance that are up, even if they do not have any IPv4 addresses.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-forwarding</a> <a href="#">receive-ipv4-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv4-check</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**receive-ipv6-check** *boolean*

<b>Description</b>	If set to true then the following check is done on every subinterface of the network-instance: if an IPv6 packet is received on a subinterface and the IPv6 oper-status of this subinterface is down the packet is discarded. If this leaf is set to false then received IPv6 packets are accepted on all subinterfaces of the network-instance that are up, even if they do not have any IPv6 addresses.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-forwarding</a> <a href="#">receive-ipv6-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-check</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ip-load-balancing

<b>Description</b>	Container for IP load-balancing options that are specific to the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-load-balancing</a>
<b>Tree</b>	<a href="#">ip-load-balancing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## resilient-hash-prefix [ip-prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	List of IPv4 and IPv6 prefixes which should be programmed for resilient ECMP hashing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-load-balancing</a> <a href="#">resilient-hash-prefix</a> <a href="#">ip-prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
<b>Tree</b>	<a href="#">resilient-hash-prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip-prefix ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	IPv4 or IPv6 prefix. Active routes in the FIB that exactly match this prefix or that are longer matches of this prefix are provided with resilient-hash programming.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-load-balancing</a> <a href="#">resilient-hash-prefix</a> <a href="#">ip-prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**hash-buckets-per-path** *number*

<b>Description</b>	The number of times each next-hop is repeated in the fill pattern if there are max-paths ECMP next-hops  A larger number consumes more resources but provides more granularity when flows need to be moved. There is a platform-specific limit to the product of this hash-buckets-per-path value and the max-paths value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-load-balancing resilient-hash-prefix ip-prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">hash-buckets-per-path</a> <i>number</i>
<b>Tree</b>	<a href="#">hash-buckets-per-path</a>
<b>Range</b>	1 to 32
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-paths** *number*

<b>Description</b>	The maximum number of ECMP next-hops per route associated with the resilient-hash prefix  If a matching route has more than this number of ECMP next-hops only the first N are used, where N is the value of this parameter. There is a platform-specific limit to the product of this max-paths value and the hash-buckets-per-path value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-load-balancing resilient-hash-prefix ip-prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">max-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">max-paths</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-tunnel-decapsulation**

<b>Description</b>	Container for the IP tunnel decapsulation group function
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation</a>
<b>Tree</b>	<a href="#">ip-tunnel-decapsulation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**group name** *string*

<b>Description</b>	Name of the GRE decapsulation group  Each decapsulation group can be used to terminate GRE encapsulated packets, which are then forwarded based on the headers of the underlying payload frame type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation group name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**name** *string*

<b>Description</b>	A unique identifier for the decapsulation group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation group name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**allowed-payloads** *keyword*

<b>Description</b>	Specifies the type of payload packet accepted and forwarded by the associated decapsulation group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation group name</a> <i>string</i> <a href="#">allowed-payloads</a> <i>keyword</i>
<b>Tree</b>	<a href="#">allowed-payloads</a>
<b>Default</b>	mpls
<b>Options</b>	<ul style="list-style-type: none"> <li>mpls Support and forward MPLS encapsulated packets as the payload</li> <li>ipv4</li> </ul>

- Support and forward IPv4 packets as the payload
- ipv6
- Support and forward IPv6 packets as the payload

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### termination-subnet [ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	List of decapsulation subnets for the associated decapsulation group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation group name</a> <i>string</i> <a href="#">termination-subnet ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">termination-subnet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
<b>Max. Elements</b>	1

### ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	IP prefix to match for decapsulation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">ip-tunnel-decapsulation group name</a> <i>string</i> <a href="#">termination-subnet ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### maintenance-policies

<b>Description</b>	Container with maintenance policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies</a>
<b>Tree</b>	<a href="#">maintenance-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy maintenance-policy-name** *string*

<b>Description</b>	Enter the policy list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maintenance-policy-name** *string*

<b>Description</b>	A unique identifying name for the maintenance policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**revert-timer** (*number* | *keyword*)

<b>Description</b>	Revert timer for the segment-list.  Timer till a revert to primary/best path after it is recovered from a failure. In case of uncolored te-policy, applies to primary segment-list and in case of colored te-policy applies to best candidate path.  The default is 0 seconds.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">revert-timer</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">revert-timer</a>
<b>Range</b>	1 to 4320
<b>Default</b>	disable
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**seamless-bfd**

<b>Description</b>	When present, this node attempts to setup a seamless BFD session on every segment-list of every SR policy that uses maintenance-policy, but only if that SR policy is a primary or standby (secondary) candidate path. The transition of an Sbfd session from up to down is a trigger for rerouting traffic around a failed primary path.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <b>seamless-bfd</b>
<b>Tree</b>	<a href="#">seamless-bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**desired-minimum-transmit-interval** *number*

<b>Description</b>	The minimum interval between transmission of BFD control packets  This value is advertised to the peer, however the actual interval used is specified by taking the maximum of desired-minimum-transmit-interval and the value of the remote required-minimum-receive interval value. This value is specified as an integer number of microseconds.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd desired-minimum-transmit-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">desired-minimum-transmit-interval</a>
<b>Range</b>	10000 to 100000000
<b>Default</b>	1000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detection-multiplier** *number*

<b>Description</b>	The number of packets that must be missed to declare this session as down  The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd detection-multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">detection-multiplier</a>

<b>Range</b>	3 to 20
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-timer (*number* | *keyword*)

<b>Description</b>	<p>Specifies a hold-down timer value when seamless-bfd is enabled</p> <p>The timer is started when the number of S-BFD sessions that are up drops below the threshold. The TE-policy path is not considered to be up again until the hold-down timer has expired and the number of S-BFD sessions that are up equals or exceeds the threshold. A grace period after session down such that sBFD session flaps does not impact active path.</p> <p>The default is 4 seconds.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd hold-down-timer</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Range</b>	1 to 500
<b>Default</b>	4
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>disable</code></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mode *keyword*

<b>Description</b>	<p>Specifies requested protection method</p> <p><code>ecmp-protected</code> is valid for colored te-policies and programs all the valid segment lists and manages their availability using seamless-BFD for each segment list. Switchover between candidate paths is triggered by the node if number of segment-lists up is less than the threshold on the active policy.<code>ecmp-protected</code> is not valid for uncolored sr-policies.</p> <p><code>linear</code> is valid for uncolored te-policies and triggers fail-over among active segment-lists, primary to standby / secondary.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>

<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• ecmp-protected</li> <li>• linear</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### return-path-label *number*

<b>Description</b>	<p>The MPLS label to be used to by the far-end device to return the BFD message</p> <p>This label is added as the bottom value in the segment routing label stack and will be used by the far-end device to return BFD message to the originator. This value could either be a MPLS label or a binding SID that will be used at the far-end to match an appropriate policy to return the traffic.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd return-path-label</a> <i>number</i>
<b>Tree</b>	<a href="#">return-path-label</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### threshold *number*

<b>Description</b>	Minimum number of up seamless-BFD sessions for up te-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">threshold</a>
<b>Range</b>	1 to 32
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### wait-for-up-timer *number*

<b>Description</b>	Specifies a wait-for-up timer value when seamless-bfd is enabled
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This timer takes effect if BFD does not come up, or BFD goes from up to down. The timer is started when BFD is first enabled on a segment-list or BFD transitions from up to down. When the timer expires if BFD is not yet come up, then the path is torn down by removing it from the TTM and the PI and the retry timer is started.

The default is 4 seconds.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i> <a href="#">seamless-bfd wait-for-up-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">wait-for-up-timer</a>
<b>Range</b>	1 to 1800
<b>Default</b>	4
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls

<b>Description</b>	Enable the mpls context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## icmp-tunneling *boolean*

<b>Description</b>	<p>When enabled, ICMP messages generated by the router acting in the role of a transit LSR are injected in the forward direction of the LSP, to be turned around and sent back to the sender of the IP payload by the egress LER.</p> <p>If a transit LSR receives an MPLS packet that cannot be forwarded (e.g. label TTL has expired, or the egress subinterface MPLS MTU was exceeded) and the MPLS packet has an IP payload, the router will generate an appropriate ICMP error message. When icmp-tunneling is 'false' the ICMP error message is dropped if there is no IP route back to the source in the network-instance that received the MPLS packet.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls icmp-tunneling</a> <i>boolean</i>
<b>Tree</b>	<a href="#">icmp-tunneling</a>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-entry** *top-label number preference number*

**Description** Enter the static-entry list instance

**Context** [network-instance name](#) *string* [mpls static-entry top-label number preference number](#)

**Tree** [static-entry](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **top-label** *number*

**Description** A received MPLS packet, received on any subinterface, matches this static entry if its top label stack entry contains the label value specified by this leaf.

**Context** [network-instance name](#) *string* [mpls static-entry top-label number preference number](#)

**Range** 16 to 1048575

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **preference** *number*

**Description** For a given top label value the entry with the lowest preference is selected as the active entry

**Context** [network-instance name](#) *string* [mpls static-entry top-label number preference number](#)

**Range** 0 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

**Description** Used to disable the entire static route and all its next-hops.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**collect-stats** *boolean*

<b>Description</b>	When set to true, stats resources are used to count the number of incoming packets matching the top label value of this static MPLS route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <a href="#">collect-stats</a> <i>boolean</i>
<b>Tree</b>	<a href="#">collect-stats</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**installed** *boolean*

<b>Description</b>	Indicates whether the MPLS route entry was programmed in the data path.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <a href="#">installed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">installed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-group** *reference*

<b>Description</b>	Enter the next-hop-group context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <a href="#">next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>

<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operation** *keyword*

<b>Description</b>	The operation to be performed with the top label.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <b>operation</b> <i>keyword</i>
<b>Tree</b>	<a href="#">operation</a>
<b>Default</b>	swap
<b>Options</b>	<ul style="list-style-type: none"> <li>• pop</li> <li>• swap</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **resolved-next-hop-group-id** *reference*

<b>Description</b>	Enter the resolved-next-hop-group-id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-entry top-label</a> <i>number</i> <a href="#">preference</a> <i>number</i> <b>resolved-next-hop-group-id</b> <i>reference</i>
<b>Tree</b>	<a href="#">resolved-next-hop-group-id</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group</a> <i>index</i> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-label-block** *reference*

<b>Description</b>	Enter the static-label-block context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mpls static-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">static-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges static</a> <i>name</i> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-label-block-status** *keyword*

**Description** Status of the label block.  
The label block may show as unavailable if there is pending cleanup.

**Context** [network-instance name](#) *string* [mpls static-label-block-status](#) *keyword*

**Tree** [static-label-block-status](#)

**Options**

- available
- unavailable

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-forwarding**

**Description** Enter the mpls-forwarding context

**Context** [network-instance name](#) *string* [mpls-forwarding](#)

**Tree** [mpls-forwarding](#)

**Configurable** True

**Platforms** Supported on all platforms

### **forward-received-packets** *boolean*

**Description** When set to true, MPLS packets received on any subinterface of the network-instance will be forwarded according to the matching ILM entries.  
When set to false, MPLS packets are discarded if received on any subinterface of the network-instance.  
In the default network-instance the default is 'true'.

**Context** [network-instance name](#) *string* [mpls-forwarding forward-received-packets](#) *boolean*

**Tree** [forward-received-packets](#)

**Configurable** True

**Platforms** Supported on all platforms

**mtu**

<b>Description</b>	Top-level container for configuration and state data related to network-instance MTU
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mtu</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**path-mtu-discovery** *boolean*

<b>Description</b>	<p>Enables or disables path MTU discovery in this network-instance</p> <p>This is controlled via the kernel <code>ip_no_pmtu_disc</code> option. Path MTU discovery (PMTUD) is a standardized technique in networking for determining the MTU size on the network path between two hosts, usually with the goal of avoiding IP fragmentation.</p> <p>For IPv4 packets, Path MTU discovery works by setting the Don't Fragment (DF) flag bit in the IP headers of outgoing packets. Then, any device along the path whose MTU is smaller than the packet will drop it, and send back an Internet Control Message Protocol (ICMP) Fragmentation Needed (Type 3, Code 4) message containing its MTU, allowing the source host to reduce its Path MTU appropriately. The process is repeated until the MTU is small enough to traverse the entire path without fragmentation.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">mtu</a> <a href="#">path-mtu-discovery</a> <i>boolean</i>
<b>Tree</b>	<a href="#">path-mtu-discovery</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**multicast-forwarding-information-base**

<b>Description</b>	Enter the multicast-forwarding-information-base context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base</a>
<b>Tree</b>	<a href="#">multicast-forwarding-information-base</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**multicast-route** *source* (*ipv4-address* | *ipv6-address*) *group* (*ipv4-address* | *ipv6-address*)

<b>Description</b>	List of all the MFIB entries in the instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">multicast-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**source** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address of the MFIB entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**group** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group address of the MFIB entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-update** *string*

<b>Description</b>	Last update of this MFIB entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### outgoing-interface *index number*

**Description** List of the outgoing interfaces for this MFIB entry

**Context** [network-instance name](#) *string* [multicast-forwarding-information-base multicast-route source](#) (*ipv4-address* | *ipv6-address*) [group](#) (*ipv4-address* | *ipv6-address*) [outgoing-interface index number](#)

**Tree** [outgoing-interface](#)

**Configurable** False

**Platforms** Supported on all platforms

### index *number*

**Description** network instance allocated sub interface index

**Context** [network-instance name](#) *string* [multicast-forwarding-information-base multicast-route source](#) (*ipv4-address* | *ipv6-address*) [group](#) (*ipv4-address* | *ipv6-address*) [outgoing-interface index number](#)

**Configurable** False

**Platforms** Supported on all platforms

### forward *boolean*

**Description** Whether the outgoing interface is in forwarding state

**Context** [network-instance name](#) *string* [multicast-forwarding-information-base multicast-route source](#) (*ipv4-address* | *ipv6-address*) [group](#) (*ipv4-address* | *ipv6-address*) [outgoing-interface index number](#) [forward boolean](#)

**Tree** [forward](#)

**Configurable** False

**Platforms** Supported on all platforms

### outgoing-next-hop-group *index number*

**Description** List of the outgoing tunnel next-hop-groups associated with this MFIB entry

**Context** [network-instance name](#) *string* [multicast-forwarding-information-base multicast-route source](#) (*ipv4-address* | *ipv6-address*) [group](#) (*ipv4-address* | *ipv6-address*) [outgoing-next-hop-group index number](#)

**Tree** [outgoing-next-hop-group](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**index** *number*

<b>Description</b>	Next-hop-group allocated index
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">outgoing-next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**forward** *boolean*

<b>Description</b>	Whether the outgoing next-hop-group is in forwarding state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">multicast-forwarding-information-base multicast-route source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">outgoing-next-hop-group index</a> <i>number</i> <a href="#">forward</a> <i>boolean</i>
<b>Tree</b>	<a href="#">forward</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-groups**

<b>Description</b>	Enable the next-hop-groups context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups</a>
<b>Tree</b>	<a href="#">next-hop-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**group** *name string*

<b>Description</b>	Specifies the next hop group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**name** *string*

<b>Description</b>	Specifies the next hop group name
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable this next-hop-group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**blackhole**

<b>Description</b>	Enable the blackhole context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">blackhole</a>
<b>Tree</b>	<a href="#">blackhole</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate-icmp** *boolean*

<b>Description</b>	When set to true the router generates ICMP unreachable messages for the dropped packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">blackhole</a> <a href="#">generate-icmp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate-icmp</a>
<b>Default</b>	false

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **nexthop** *index number*

<b>Description</b>	Enter the nexthop list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a>
<b>Tree</b>	<a href="#">nexthop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	128

### **index** *number*

<b>Description</b>	Numerical index of the next-hop member
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable this next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a> <a href="#">admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **encapsulate-header** *keyword*

<b>Description</b>	When forwarding a packet to the specified next-hop the local system performs an encapsulation of the packet, adding the specified header type
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <a href="#">encapsulate-header</a> <i>keyword</i>
<b>Tree</b>	<a href="#">encapsulate-header</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>gre</li> </ul> <p>The encapsulation header is a Generic Routing Encapsulation header</p>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## failure-detection

<b>Description</b>	Enter the failure-detection context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <a href="#">failure-detection</a>
<b>Tree</b>	<a href="#">failure-detection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## enable-bfd

<b>Description</b>	Enable the enable-bfd context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <a href="#">failure-detection enable-bfd</a>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The local address to be used for the associated BFD session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <a href="#">failure-detection enable-bfd local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )

<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-discriminator *number*

<b>Description</b>	The local discriminator to be used for the associated BFD session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a> <i>number</i> <a href="#">failure-detection enable-bfd local-discriminator number</a>
<b>Tree</b>	<a href="#">local-discriminator</a>
<b>Range</b>	1 to 16384
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-discriminator *number*

<b>Description</b>	The remote discriminator to be used for the associated BFD session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a> <i>number</i> <a href="#">failure-detection enable-bfd remote-discriminator number</a>
<b>Tree</b>	<a href="#">remote-discriminator</a>
<b>Range</b>	1 to 16384
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### gre

<b>Description</b>	Parameters relating to GRE encapsulation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number</a> <i>gre</i>
<b>Tree</b>	<a href="#">gre</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **destination-ip** (*ipv4-address-unicast* | *ipv6-address-unicast*)

<b>Description</b>	Destination IP address to use for the encapsulated packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number gre destination-ip</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast</i> )
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **source-ip** (*ipv4-address-unicast* | *ipv6-address-unicast*)

<b>Description</b>	Source IP address to use for the encapsulated packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number gre source-ip</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast</i> )
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **ip-address** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	The next-hop IPv4 or IPv6 address If the IPv6 address is a link-local address then the zoned format must be used
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index number ip-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**pushed-mpls-label-stack** (*number* | *keyword*)

<b>Description</b>	A list of MPLS labels to push onto the packet when forwarding to this particular next-hop  Default is none/empty. Pushing an MPLS label stack is not supported unless the resolve flag is set to false.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <b>pushed-mpls-label-stack</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">pushed-mpls-label-stack</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**resolve** *boolean*

<b>Description</b>	When set to true, the router is allowed to use any route to resolve the nexthop address to an outgoing interface  When set to false the router is only allowed to use a local route to resolve the next-hop address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i> <a href="#">nexthop index</a> <i>number</i> <b>resolve</b> <i>boolean</i>
<b>Tree</b>	<a href="#">resolve</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-down-reason** *keyword*

<b>Description</b>	The reason the network-instance is down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <b>oper-down-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-down</li> </ul>

	<ul style="list-style-type: none"> <li>no-mcid</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-mac-vrf-mtu** *number*

<b>Description</b>	<p>Operational l2-mtu of the mac-vrf network-instance. Calculated as the lowest l2-mtu of the bridged subinterfaces associated to the mac-vrf, minus the vlan tags associated to that subinterface (lowest mtu subinterface).</p> <p>When the mac-vrf has an associated irb subinterface, if the configured irb ip-mtu exceeds the oper-mac-vrf-mtu minus 14 bytes (Ethernet header), then the irb subinterface will remain operationally down.</p> <p>The oper-mac-vrf-mtu is only available in mac-vrf network-instances.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">oper-mac-vrf-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-mac-vrf-mtu</a>
<b>Range</b>	1492 to 9500
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of the network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> <li>empty Component slot is empty</li> <li>downloading Component is downloading image into memory</li> <li>booting Component is booting downloaded image</li> <li>starting Component image operational, application processes starting</li> </ul>

- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-vpws-mtu** *number*

<b>Description</b>	Operational I2-mtu of the vpws network-instance Derived from the I2-mtu of the bridged subinterface associated to the vpws, minus the vlan tags associated to that subinterface. The oper-vpws-mtu is only available in vpws network-instances.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">oper-vpws-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-vpws-mtu</a>
<b>Range</b>	1492 to 9500
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



## policy-forwarding

<b>Description</b>	Configuration and operational state relating to policy-forwarding within a network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a>
<b>Tree</b>	<a href="#">policy-forwarding</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## interface [subinterface](#) *string*

<b>Description</b>	List of subinterfaces that use the policy forwarding policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">interface subinterface</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## subinterface *string*

<b>Description</b>	Name of the subinterface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">interface subinterface</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## apply-forwarding-policy *reference*

<b>Description</b>	The policy to be applied on the interface. Packets ingress on the referenced interface should be compared to the match criteria within the specified policy, and in the case that these criteria are met, the forwarding actions specified applied.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">interface subinterface</a> <i>string</i> <a href="#">apply-forwarding-policy</a> <i>reference</i>

<b>Tree</b>	<a href="#">apply-forwarding-policy</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## interface-ref

<b>Description</b>	Reference to a subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding interface subinterface</a> <i>string</i> <a href="#">interface-ref</a>
<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface *reference*

<b>Description</b>	Reference to a base interface, for example a port or LAG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding interface subinterface</a> <i>string</i> <a href="#">interface-ref interface</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subinterface *reference*

<b>Description</b>	Reference to a subinterface This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding interface subinterface</a> <i>string</i> <a href="#">interface-ref subinterface</a> <i>reference</i>
<b>Tree</b>	<a href="#">subinterface</a>

<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### policy [policy-id](#) *string*

<b>Description</b>	A forwarding policy is defined to have a set of match criteria, allowing particular fields of a packet's header to be matched, and a set of forwarding actions which determines how the local system should forward the packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">policy</a> <a href="#">policy-id</a> <i>string</i>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
<b>Max. Elements</b>	4

### policy-id *string*

<b>Description</b>	A unique name identifying the forwarding policy. This name is used when applying the policy to a particular interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">policy</a> <a href="#">policy-id</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### description *string*

<b>Description</b>	Description string for the policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding</a> <a href="#">policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### rule *sequence-id number*

**Description** List of policy forwarding rules.

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number*

**Tree** [rule](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### *sequence-id number*

**Description** A number to indicate the relative evaluation order of the different entries; lower numbered entries are evaluated before higher numbered entries

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number*

**Range** 0 to 128

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### action

**Description** Container for the actions to be applied to packets matching the policy forwarding rule.

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [action](#)

**Tree** [action](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**decap-fallback-network-instance** *reference*

<b>Description</b>	Specifies the network-instance used as a fallback instance for lookup when applying the decap-network-instance action results in no match for the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action decap-fallback-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">decap-fallback-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**decap-network-instance** *reference*

<b>Description</b>	<p>Matching packets should be looked up in the referenced network-instance that is expected to contain 'routes' that perform IP tunnel decapsulation</p> <p>If there is a match, the packet should be decapsulated and route lookup on the new header should happen in the post-decap-network-instance. If there is no match, the packet should be looked up in the decap-fallback-network-instance. Configuration of this leaf is not valid without configuration for decap-fallback-network-instance and post-decap-network-instance.</p> <p>Configuration of this leaf is mutually exclusive with the network-instance action.</p> <p>Note: The only entries in the decap-network-instance that are relevant to this PBF action are special decap entries programmed by gRIBI.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action decap-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">decap-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**encapsulate-gre**

<b>Description</b>	Container for the GRE encapsulation actions to be applied to packets matching the policy forwarding rule.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre</a>
<b>Tree</b>	<a href="#">encapsulate-gre</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**target id** *string*

<b>Description</b>	Identifier for the GRE target group. Each target specified within this list should be treated as a endpoint to which packets should be GRE encapsulated. Where the set of destinations described within a single entry expands to more than one destination IP address, packets should be load shared across the destination using the local system's ECMP hashing mechanisms.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre</a> <a href="#">target id</a> <i>string</i>
<b>Tree</b>	<a href="#">target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
<b>Max. Elements</b>	4

**id** *string*

<b>Description</b>	A unique identifier for the target.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre</a> <a href="#">target id</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**destination** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The set of destination addresses that should be encapsulated towards. Where a subnet is specified, each address within the subnet should be treated as an independent destination for encapsulated traffic. Packets should be distributed with ECMP across the set of tunnel destination addresses.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre target id</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**ip-ttl** *number*

<b>Description</b>	The TTL that should be specified in the IP header of the GRE packet encapsulating the packet matching the rule.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre target id</a> <i>string</i> <a href="#">ip-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">ip-ttl</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**source** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source IP address that should be used when encapsulating packets from the local system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action encapsulate-gre target id</a> <i>string</i> <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**network-instance** *reference*

<b>Description</b>	When this leaf is set, packets matching the match criteria for the forwarding rule should be looked up in the network-instance that is referenced rather than the network-instance with which the interface is associated.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	When this leaf is set, packets matching the match criteria for the forwarding rule will be routed as if their destination address had been the specified next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **post-decap-network-instance** *reference*

<b>Description</b>	Specifies the network-instance used for lookup on the new header when applying the decap-network-instance action results in a match for the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">action post-decap-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">post-decap-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **description** *string*

<b>Description</b>	Description string for the rule
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True



**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## match

**Description** Container for the conditions that determine whether a packet matches this entry

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match](#)

**Tree** [match](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## ipv4

**Description** Container for match conditions associated with IPv4 header fields  
If no match conditions are provided then no IPv4 packets are matched.

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match](#) [ipv4](#)

**Tree** [ipv4](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## destination-ip

**Description** Packet matching criteria based on destination IPv4 address

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match](#) [ipv4](#) [destination-ip](#)

**Tree** [destination-ip](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**prefix string**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">policy-forwarding policy policy-id string rule sequence-id number match ipv4 destination-ip prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dscp-set (number | keyword)**

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">policy-forwarding policy policy-id string rule sequence-id number match ipv4 dscp-set (number   keyword)</a>
<b>Tree</b>	<a href="#">dscp-set</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> </ul>

	<ul style="list-style-type: none"> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **protocol** (*number* | *keyword*)

<b>Description</b>	An IPv4 packet matches this condition if its IP protocol type field matches the specified value
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <a href="#">string</a> <a href="#">rule sequence-id</a> <a href="#">number</a> <a href="#">match ipv4 protocol</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">protocol</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv6-hop</a> IPv6 hop-by-hop option</li> <li>• <a href="#">icmp</a> Internet Control Message Protocol</li> <li>• <a href="#">igmp</a> Internet Group Management Protocol</li> <li>• <a href="#">ggp</a> Gateway-to-Gateway Protocol</li> <li>• <a href="#">ipv4</a> IPv4 encapsulation</li> <li>• <a href="#">st</a> Stream Protocol</li> <li>• <a href="#">tcp</a> Transmission Control Protocol</li> <li>• <a href="#">egp</a> Exterior Gateway Protocol</li> <li>• <a href="#">igp</a> Interior Gateway Protocol</li> <li>• <a href="#">udp</a> User Datagram Protocol</li> </ul>

- ipv6  
IPv6 encapsulation
- idrp  
Inter-Domain Routing Protocol
- rsvp  
Resource Reservation Protocol
- gre  
Generic Routing Encapsulation
- esp  
IPSec Encapsulating Security Payload
- ah  
IPSec Authentication Header
- icmp6  
IPSec Authentication Header
- no-next-hdr  
No Next Header for IPv6
- ipv6-dest-opts  
Destination Options for IPv6
- eigrp  
Cisco EIGRP
- ospf  
OSPFv2 and OSPFv3
- pim  
Protocol Independent Multicast
- vrrp  
Virtual Router Redundancy Protocol
- l2tp  
Layer Two Tunneling Protocol
- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

**Configurable**

True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## source-ip

**Description** Packet matching criteria based on source IPv4 address

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv4 source-ip](#)

**Tree** [source-ip](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## prefix *string*

**Description** Match a packet if its source IP address is within the specified IPv4 prefix.

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv4 source-ip prefix](#) *string*

**Tree** [prefix](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## ipv6

**Description** Container for match conditions associated with IPv6 header fields  
If no match conditions are provided then no IPv6 packets are matched.

**Context** [network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv6](#)

**Tree** [ipv6](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**destination-ip**

<b>Description</b>	Packet matching criteria based on destination IPv6 address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match ipv6 destination-ip</a>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**prefix** *string*

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv6 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match ipv6 destination-ip prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dscp-set** (*number* | *keyword*)

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match ipv6 dscp-set</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">dscp-set</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> </ul>

- AF21
- AF22
- AF23
- CS3
- AF31
- AF32
- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**next-header** (*number* | *keyword*)**Description**

An IPv6 packet matches this condition if its Next-Header type field matches the specified value

**Context**

[network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv6 next-header](#) (*number* | *keyword*)

**Tree**

[next-header](#)

**Range**

0 to 255

**Options**

- [ipv6-hop](#)  
IPv6 hop-by-hop option
- [icmp](#)  
Internet Control Message Protocol
- [igmp](#)  
Internet Group Management Protocol
- [ggp](#)  
Gateway-to-Gateway Protocol
- [ipv4](#)

- IPv4 encapsulation
  - st  
Stream Protocol
  - tcp  
Transmission Control Protocol
  - egp  
Exterior Gateway Protocol
  - igp  
Interior Gateway Protocol
  - udp  
User Datagram Protocol
  - ipv6  
IPv6 encapsulation
    - idrp  
Inter-Domain Routing Protocol
    - rsvp  
Resource Reservation Protocol
    - gre  
Generic Routing Encapsulation
    - esp  
IPSec Encapsulating Security Payload
    - ah  
IPSec Authentication Header
    - icmp6  
IPSec Authentication Header
    - no-next-hdr  
No Next Header for IPv6
    - ipv6-dest-opts  
Destination Options for IPv6
  - eigrp  
Cisco EIGRP
  - ospf  
OSPFv2 and OSPFv3
  - pim  
Protocol Independent Multicast
  - vrrp



- Virtual Router Redundancy Protocol
- l2tp  
Layer Two Tunneling Protocol
- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**source-ip****Description**

Packet matching criteria based on source IPv6 address

**Context**[network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv6](#) [source-ip](#)**Tree**[source-ip](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**prefix string****Description**

Match a packet if its source IP address is within the specified IPv6 prefix.

**Context**[network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [match ipv6](#) [source-ip](#) [prefix](#) *string***Tree**[prefix](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transport**

<b>Description</b>	Container for match conditions associated with transport-layer packet fields
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**destination-port** (*string* | *number* | *keyword*)

<b>Description</b>	Destination port or range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match transport destination-port</a> ( <i>string</i>   <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">destination-port</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>acap</code> Application Configuration Access Protocol</li> <li>• <code>afp-tcp</code> Apple Filing Protocol over TCP</li> <li>• <code>arns</code> A Remote Network Server System</li> <li>• <code>asf-rmcp</code> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <code>ashare</code> AppleShare IP Web Administration</li> <li>• <code>atalk-rm</code> AppleTalk Routing Maintenance</li> <li>• <code>aurp</code> AppleTalk Update-Based Routing Protocol</li> <li>• <code>auth</code> Authentication Service</li> <li>• <code>bfd</code> Bidirectional Forwarding Detection Single Hop</li> </ul>

- bfd-echo  
  BFD Echo
- bftp  
  Background File Transfer Program
- bgmp  
  Border Gateway Multicast Protocol
- bgp  
  Border Gateway Protocol
- bootpc  
  Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
  Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
  CCSO Nameserver
- chargen  
  Character Generator Protocol (CHARGEN)
- cisco-tdp  
  Cisco Tag Distribution Protocol
- citadel  
  Citadel
- clearcase  
  ClearCase albd
- commerce  
  Commerce Applications
- courier  
  Remote Procedure Call
- daytime  
  Daytime Protocol
- dhcpv6-client  
  DHCPv6 Client
- dhcpv6-server  
  DHCPv6 Server
- dhcp-failover  
  DHCP Failover Protocol
- dicom  
  Digital Imaging and Communications in Medicine

- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)

- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)

- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A

- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol

- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)



- ptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap

- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)

	<ul style="list-style-type: none"> <li>• <code>systat</code> Active Users (systat service)</li> <li>• <code>tacacs</code> TACACS Login Host protocol</li> <li>• <code>talk</code> Talk</li> <li>• <code>tcpmux</code> TCP Port Service Multiplexer (TCPMUX)</li> <li>• <code>tcpnethasprv</code> tcpnethasprv, Aladdin Knowledge Systems Hasp services</li> <li>• <code>fttp</code> Trivial File Transfer Protocol (TFTP)</li> <li>• <code>time</code> Time Protocol</li> <li>• <code>timed</code> Timeserver</li> <li>• <code>ups</code> Uninterruptible power supply (UPS)</li> <li>• <code>xdmcp</code> X Display Manager Control Protocol (XDMCP)</li> <li>• <code>xns-ch</code> Xerox Network Systems (XNS) Clearinghouse (Name Server)</li> <li>• <code>xns-mail</code> Xerox Network Systems (XNS) Mail</li> <li>• <code>xns-time</code> Xerox Network Systems (XNS) Time Protocol</li> <li>• <code>z3950</code> ANSI Z39.50</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**source-port** (*string* | *number* | *keyword*)

**Description** Source port or range

---

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">match transport source-port</a> ( <i>string   number   keyword</i> )
<b>Tree</b>	<a href="#">source-port</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">acap</a> Application Configuration Access Protocol</li> <li>• <a href="#">afp-tcp</a> Apple Filing Protocol over TCP</li> <li>• <a href="#">arns</a> A Remote Network Server System</li> <li>• <a href="#">asf-rmcp</a> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <a href="#">ashare</a> AppleShare IP Web Administration</li> <li>• <a href="#">atalk-rm</a> AppleTalk Routing Maintenance</li> <li>• <a href="#">aurp</a> AppleTalk Update-Based Routing Protocol</li> <li>• <a href="#">auth</a> Authentication Service</li> <li>• <a href="#">bfd</a> Bidirectional Forwarding Detection Single Hop</li> <li>• <a href="#">bfd-echo</a> BFD Echo</li> <li>• <a href="#">bftp</a> Background File Transfer Program</li> <li>• <a href="#">bgmp</a> Border Gateway Multicast Protocol</li> <li>• <a href="#">bgp</a> Border Gateway Protocol</li> <li>• <a href="#">bootpc</a> Bootstrap Protocol (BOOTP) Client and DHCP Client</li> <li>• <a href="#">bootps</a> Bootstrap Protocol (BOOTP) Server and DHCP Server</li> <li>• <a href="#">ccso-ns</a></li> </ul>

- CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro

## Efficient Short Remote Operations (ESRO)

- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc

- Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login

- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)



- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who

- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)

- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)

- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethaspsrv  
tcpnethaspsrv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)

- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**tcam-entries****Description**

Information about the TCAM entries used to implement the policy forwarding rule

**Context**[network-instance name](#) *string* [policy-forwarding policy](#) [policy-id](#) *string* [rule sequence-id](#) *number* [tcam-entries](#)**Tree**[tcam-entries](#)**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**forwarding-complex** [complex-identifier](#) *string***Description**

List of forwarding complexes in the system

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex</a> <a href="#">complex-identifier</a> <i>string</i>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **complex-identifier** *string*

<b>Description</b>	A forwarding complex in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex</a> <a href="#">complex-identifier</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **tcam-entries** *number*

<b>Description</b>	The number of TCAM entries required to implement this rule.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">rule sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex</a> <a href="#">complex-identifier</a> <i>string</i> <a href="#">tcam-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">tcam-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **type** *keyword*

<b>Description</b>	The type of the policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">policy-forwarding policy</a> <a href="#">policy-id</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	vrf-selection-policy
<b>Options</b>	<ul style="list-style-type: none"> <li>• pbr-policy</li> </ul>

The policy reflects a policy-based routing policy that supports generic PBR actions.

- vrf-selection-policy

The policy is used only to classify incoming packets into corresponding network instances.

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**protocols****Description**

The routing protocols that are enabled for this network-instance.

**Context**

[network-instance name](#) *string* [protocols](#)

**Tree**

[protocols](#)

**Configurable**

True

**Platforms**

Supported on all platforms

**bgp****Description**

Top-level configuration and operational state for Border Gateway Protocol (BGP)

**Context**

[network-instance name](#) *string* [protocols](#) [bgp](#)

**Tree**

[bgp](#)

**Configurable**

True

**Platforms**

Supported on all platforms

**admin-state** *keyword***Description**

Administratively enable or disable the entire BGP instance

Disable causes all BGP sessions to be taken down immediately, even if admin-state at the group or neighbor level of some of these sessions is still set as enable.

**Context**

[network-instance name](#) *string* [protocols](#) [bgp](#) [admin-state](#) *keyword*

**Tree**

[admin-state](#)

**Default**

enable

**Options**

- enable

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **afi-safi** *afi-safi-name identityref*

<b>Description</b>	List of address families supported by the BGP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string protocols bgp afi-safi afi-safi-name identityref</i>
<b>Tree</b>	<a href="#">afi-safi</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **afi-safi-name** *identityref*

<b>Description</b>	The name of a BGP address family, which translates to a specific AFI value and a specific SAFI value
<b>Context</b>	<a href="#">network-instance name</a> <i>string protocols bgp afi-safi afi-safi-name identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>ipv4-unicast</b> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <b>ipv6-unicast</b> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <b>l3vpn-ipv4-unicast</b> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <b>l3vpn-ipv6-unicast</b> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <b>ipv4-labeled-unicast</b> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <b>ipv6-labeled-unicast</b> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <b>evpn</b> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <b>route-target</b> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <b>sr-policy-ipv4</b> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <b>sr-policy-ipv6</b></li> </ul>



## SR-TE Policy (AFI 2, SAFI 73)

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**active-routes** *number*

<b>Description</b>	The total number of routes belonging to this AFI/SAFI that are installed and used, being best routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">active-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**add-paths**

<b>Description</b>	Configure support for the advertisement and receipt of multiple paths for the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a>
<b>Tree</b>	<a href="#">add-paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive** *boolean*

<b>Description</b>	Enable capability negotiation to receive multiple path advertisements from a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">receive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send *boolean*

<b>Description</b>	Enable capability negotiation to send multiple path advertisements to a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">add-paths send</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-max *number*

<b>Description</b>	Send the N best paths for a single NLRI, or as many as possible until there are no more valid paths to send.  This ensures the best path is advertised but does not limit the additional paths to being 'used' paths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">add-paths send-max</a> <i>number</i>
<b>Tree</b>	<a href="#">send-max</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-multipath

<b>Description</b>	Send the used paths for a single NLRI, including all paths that are multipaths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">add-paths send-multipath</a>
<b>Tree</b>	<a href="#">send-multipath</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

**Description** This leaf indicates whether the AFI-SAFI is enabled for the instance

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [admin-state](#) *keyword*

**Tree** [admin-state](#)

**Default** disable

**Options**

- enable
- disable

**Configurable** True

**Platforms** Supported on all platforms

### **best-path-selection**

**Description** Container with options that control the BGP decision process for a specific AFI-SAFI

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [best-path-selection](#)

**Tree** [best-path-selection](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **accumulated-igp** *boolean*

**Description** Set to true to enable AIGP metric comparison for all routes of the AFI-SAFI, and to add AIGP attribute to all imported/redistributed routes

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [best-path-selection accumulated-igp](#) *boolean*

**Tree** [accumulated-igp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**evpn**

<b>Description</b>	Options related to the EVPN address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of EVPN routes with IPv6 next-hops to peers  If this is set to true and the local-address used towards the peer is an IPv6 address and BGP is supposed to apply next-hop-self then the route is advertised with the IPv6 local-address as the BGP next-hop. If this is set to false, then the EVPN route is advertised with an IPv4 next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**default-received-encapsulation** *keyword*

<b>Description</b>	Indicates the encapsulation considered when the routes are received without BGP encapsulation extended community  Most EVPN routes are usually received with a BGP encapsulation extended community that indicates the encapsulation and therefore how to interpret the value in the received Label fields of the routes. If no encapsulation is received, BGP will validate the route as MPLS or VXLAN or SRv6 depending on how this command is configured.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">default-received-encapsulation</a> <i>keyword</i>
<b>Tree</b>	<a href="#">default-received-encapsulation</a>
<b>Default</b>	vxlan
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inter-as-vpn** *boolean*

<b>Description</b>	When set to true, received EVPN routes that are not imported by any network-instance are retained in the BGP RIB and considered 'used' so that they can be propagated to any EBGP or IBGP peer.  This command supersedes the effect of keep-all-routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref evpn inter-as-vpn</a> <i>boolean</i>
<b>Tree</b>	<a href="#">inter-as-vpn</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **keep-all-routes** *boolean*

<b>Description</b>	When this is set to true all received EVPN routes are retained in the RIB-IN, even those not imported by any network-instance; these routes display as 'rejected' and cannot be propagated to other peers.  When this is false, EVPN routes that are not imported by any network-instance are dropped and not retained in the BGP RIB-IN; policy changes affecting received EVPN routes will trigger the sending of ROUTE_REFRESH messages towards all EVPN family peers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref evpn keep-all-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">keep-all-routes</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **next-hop-resolution**

<b>Description</b>	Options for controlling next-hop resolution procedures
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution</a> <a href="#">ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

<b>Description</b>	Options related to resolution using IP routes in the FIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>

<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ignore-default-routes *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv4-next-hops route-resolution ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv4-next-hops tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref evpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-next-hops**

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv6 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref evpn next-hop-resolution ipv6-next-hops</a>
<b>Tree</b>	<a href="#">ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-resolution**

<b>Description</b>	Options related to resolution using IP routes in the FIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref evpn next-hop-resolution ipv6-next-hops route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">route-resolution</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ignore-default-routes** *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">route-resolution</a> <a href="#">ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-resolution**

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv6-next-hops tunnel-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mandatory** *boolean*

**Description** If true, a tunnel can resolve the next-hop only if it has all the same tags as the route

If false, it is possible to select a tunnel that has none or only some of the same tags as the route.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) [identityref evpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag mandatory](#) *boolean*

**Tree** [mandatory](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop-self-route-reflector** *boolean*

**Description** When set to true, received EVPN MPLS routes are kept in the RIB and readvertised to the other route reflector clients with a local next-hop and EVI label

This command triggers the programming of an EVI label swap operation for each received EVPN MPLS route.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) [identityref evpn next-hop-self-route-reflector](#) *boolean*

**Tree** [next-hop-self-route-reflector](#)

**Default** false

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rapid-update** *boolean*

**Description** When this is set to true, EVPN UPDATEs advertising reachability and withdrawals are advertised immediately, bypassing the session level min-

	route-advertisement-interval. When this is false, reachability updates and withdrawals are subject to the MRAI interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn rapid-update</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rapid-update</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	14

### **import-policy** *reference*

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	14

**ipv4-labeled-unicast**

<b>Description</b>	Options related to the labeled IPv4-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv4-labeled-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-paths**

<b>Description</b>	Configure backup paths support for the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast backup-paths</a>
<b>Tree</b>	<a href="#">backup-paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**install** *boolean*

<b>Description</b>	Install a backup path for every NLRI in the address family, when a suitable one exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast backup-paths install</a> <i>boolean</i>
<b>Tree</b>	<a href="#">install</a>

<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## convergence

<b>Description</b>	Options for controlling and monitoring routing convergence of the relevant address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## converged-peers *number*

<b>Description</b>	The number of peers that have sent an EOR marker for the address family since the last BGP restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence converged-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">converged-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## convergence-state *keyword*

<b>Description</b>	Enter the convergence-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence convergence-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">convergence-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• waiting BGP has recently restarted and no sessions have re-established yet</li> <li>• started BGP has recently restarted and at least one session has re-established with support of the address family</li> <li>• partial</li> </ul>

BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.

- timeout

BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired

- converged

All non-slow peers that support the address family have have advertised the End-of-RIB marker for the address family

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### convergence-time *number*

<b>Description</b>	The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence convergence-time</a> <i>number</i>
<b>Tree</b>	<a href="#">convergence-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### first-up-peer-time *number*

<b>Description</b>	The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence first-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">first-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-up-peer-time *number*

<b>Description</b>	The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence last-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">last-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-wait-to-advertise** *number*

<b>Description</b>	<p>The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer</p> <p>The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">max-wait-to-advertise</a>
<b>Range</b>	0 to 3600
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-max-wait-to-advertise** *number*

<b>Description</b>	The operational value of the max-wait-to-advertise timer for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast convergence oper-max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-max-wait-to-advertise</a>
<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast convergence up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast convergence up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-resolution**

<b>Description</b>	Options for controlling next-hop resolution procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-next-hops**

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

<b>Description</b>	Options related to resolution using IP routes in the FIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv4-next-hops route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv4-next-hops route-resolution admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ignore-default-routes *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv4-next-hops route-resolution ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

**Description** Options related to resolution using tunnels in the tunnel table

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv4-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution](#)

**Tree** [tunnel-resolution](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv4-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## selection-attributes

**Description** Attributes for narrowing the selection of tunnels

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv4-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes](#)

**Tree** [selection-attributes](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag**

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a> <a href="#">mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-next-hops**

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv6 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a>
<b>Tree</b>	<a href="#">ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-resolution**

<b>Description</b>	Options related to resolution using IP routes in the FIB
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ignore-default-routes** *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tunnel-resolution**

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution</a>

<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mandatory** *boolean*

**Description** If true, a tunnel can resolve the next-hop only if it has all the same tags as the route

If false, it is possible to select a tunnel that has none or only some of the same tags as the route.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) [identityref ipv4-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag mandatory](#) *boolean*

**Tree** [mandatory](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rapid-update** *boolean*

**Description** When true, label-ipv4 update messages are advertised immediately, bypassing the MRAI

When this is false, reachability updates and withdrawals are subject to the MRAI interval.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) [identityref ipv4-labeled-unicast rapid-update](#) *boolean*

**Tree** [rapid-update](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **receive-ipv6-next-hops** *boolean*

**Description** Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops

When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the



scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-unicast

<b>Description</b>	Options related to the IPv4-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## advertise-ipv6-next-hops *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## convergence

<b>Description</b>	Options for controlling and monitoring routing convergence of the relevant address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**converged-peers** *number*

<b>Description</b>	The number of peers that have sent an EOR marker for the address family since the last BGP restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence converged-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">converged-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**convergence-state** *keyword*

<b>Description</b>	Enter the convergence-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence convergence-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">convergence-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• waiting BGP has recently restarted and no sessions have re-established yet</li> <li>• started BGP has recently restarted and at least one session has re-established with support of the address family</li> <li>• partial BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.</li> <li>• timeout BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired</li> <li>• converged All non-slow peers that support the address family have have advertised the End-of-RIB marker for the address family</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**convergence-time** *number*

<b>Description</b>	The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast convergence convergence-time</a> <i>number</i>
<b>Tree</b>	<a href="#">convergence-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**first-up-peer-time** *number*

<b>Description</b>	The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast convergence first-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">first-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-up-peer-time** *number*

<b>Description</b>	The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast convergence last-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">last-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-wait-to-advertise** *number*

<b>Description</b>	The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer  The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast convergence max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">max-wait-to-advertise</a>

<b>Range</b>	0 to 3600
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-max-wait-to-advertise** *number*

<b>Description</b>	The operational value of the max-wait-to-advertise timer for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence oper-max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-max-wait-to-advertise</a>
<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast convergence up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## next-hop-resolution

<b>Description</b>	Options for controlling next-hop resolution procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast next-hop-resolution ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">bgp-next-hop-resolution-tunnel-type</a></li> </ul>

Base type for the types of tunnels that can be used by BGP for next-hop resolution

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mode *keyword*

<b>Description</b>	Mode to control the order of tunnel resolution compared to route resolution
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Default</b>	disabled
<b>Options</b>	<ul style="list-style-type: none"> <li>• prefer</li> <li>• require</li> <li>• disabled</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag</a>

<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mandatory *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv6 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast next-hop-resolution ipv6-next-hops</a>
<b>Tree</b>	<a href="#">ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast next-hop-resolution ipv6-next-hops tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv4-unicast next-hop-resolution ipv6-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mode *keyword*

**Description** Mode to control the order of tunnel resolution compared to route resolution

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv4-unicast next-hop-resolution ipv6-next-hops tunnel-resolution mode](#) *keyword*

**Tree** [mode](#)

**Default** disabled

**Options**

- prefer
- require
- disabled

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**selection-attributes**

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag**

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a> <a href="#">mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive-ipv6-next-hops** *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-labeled-unicast**

<b>Description</b>	Options related to the labeled IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv6-labeled-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup-paths**

<b>Description</b>	Configure backup paths support for the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast backup-paths</a>
<b>Tree</b>	<a href="#">backup-paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**install** *boolean*

<b>Description</b>	Install a backup path for every NLRI in the address family, when a suitable one exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast backup-paths</a> <a href="#">install</a> <i>boolean</i>
<b>Tree</b>	<a href="#">install</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**convergence**

<b>Description</b>	Options for controlling and monitoring routing convergence of the relevant address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**converged-peers** *number*

<b>Description</b>	The number of peers that have sent an EOR marker for the address family since the last BGP restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast convergence converged-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">converged-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**convergence-state** *keyword*

<b>Description</b>	Enter the convergence-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast convergence convergence-state</a> <i>keyword</i>

<b>Tree</b>	<a href="#">convergence-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• waiting BGP has recently restarted and no sessions have re-established yet</li> <li>• started BGP has recently restarted and at least one session has re-established with support of the address family</li> <li>• partial BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.</li> <li>• timeout BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired</li> <li>• converged All non-slow peers that support the address family have have advertised the End-of-RIB marker for the address family</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **convergence-time** *number*

<b>Description</b>	The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast convergence convergence-time</a> <i>number</i>
<b>Tree</b>	<a href="#">convergence-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **first-up-peer-time** *number*

<b>Description</b>	The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast convergence first-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">first-up-peer-time</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-up-peer-time** *number*

**Description** The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast convergence last-up-peer-time](#) *number*

**Tree** [last-up-peer-time](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-wait-to-advertise** *number*

**Description** The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer

The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast convergence max-wait-to-advertise](#) *number*

**Tree** [max-wait-to-advertise](#)

**Range** 0 to 3600

**Default** 0

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-max-wait-to-advertise** *number*

**Description** The operational value of the max-wait-to-advertise timer for the address family

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast convergence oper-max-wait-to-advertise](#) *number*

**Tree** [oper-max-wait-to-advertise](#)

<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast convergence up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast convergence up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop-resolution**

<b>Description</b>	Options for controlling next-hop resolution procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

<b>Description</b>	Options related to resolution using IP routes in the FIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ignore-default-routes *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops route-resolution ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes</a>



<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mandatory *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv6 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv6-next-hops</a>
<b>Tree</b>	<a href="#">ipv6-next-hops</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

**Description** Options related to resolution using IP routes in the FIB

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution](#)

**Tree** [route-resolution](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

**Description** Enable or disable route resolution if no resolving tunnel is found

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution admin-state](#) *keyword*

**Tree** [admin-state](#)

**Default** enable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ignore-default-routes *boolean*

**Description** Ignore default routes, regardless of route type

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast next-hop-resolution ipv6-next-hops route-resolution ignore-default-routes](#) *boolean*

**Tree** [ignore-default-routes](#)

**Default** true

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rapid-update** *boolean*

<b>Description</b>	When true, label-ipv6 update messages are advertised immediately, bypassing the MRAI  When this is false, reachability updates and withdrawals are subject to the MRAI interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast rapid-update</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rapid-update</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-unicast**

<b>Description</b>	Options related to the IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**convergence**

<b>Description</b>	Options for controlling and monitoring routing convergence of the relevant address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**converged-peers** *number*

<b>Description</b>	The number of peers that have sent an EOR marker for the address family since the last BGP restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast convergence converged-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">converged-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**convergence-state** *keyword*

<b>Description</b>	Enter the convergence-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast convergence convergence-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">convergence-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>waiting</code> BGP has recently restarted and no sessions have re-established yet</li> </ul>

- started  
BGP has recently restarted and at least one session has re-established with support of the address family
- partial  
BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.
- timeout  
BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired
- converged  
All non-slow peers that support the address family have advertised the End-of-RIB marker for the address family

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **convergence-time** *number*

<b>Description</b>	The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast convergence convergence-time</a> <i>number</i>
<b>Tree</b>	<a href="#">convergence-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **first-up-peer-time** *number*

<b>Description</b>	The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast convergence first-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">first-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-up-peer-time** *number*

<b>Description</b>	The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast convergence</a> <a href="#">last-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">last-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-wait-to-advertise** *number*

<b>Description</b>	The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer  The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast convergence</a> <a href="#">max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">max-wait-to-advertise</a>
<b>Range</b>	0 to 3600
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-max-wait-to-advertise** *number*

<b>Description</b>	The operational value of the max-wait-to-advertise timer for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast convergence</a> <a href="#">oper-max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-max-wait-to-advertise</a>
<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast convergence up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast convergence up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-resolution**

<b>Description</b>	Options for controlling next-hop resolution procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-next-hops**

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast next-hop-resolution ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

**Description** Options related to resolution using tunnels in the tunnel table

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv4-next-hops tunnel-resolution](#)

**Tree** [tunnel-resolution](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mode *keyword*

**Description** Mode to control the order of tunnel resolution compared to route resolution

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv4-next-hops tunnel-resolution mode](#) *keyword*

**Tree** [mode](#)

**Default** disabled

**Options**

- prefer
- require
- disabled

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mandatory *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a> <a href="#">mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-next-hops

**Description** Options related to the resolution of BGP next-hops that are IPv6 addresses

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv6-next-hops](#)

**Tree** [ipv6-next-hops](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-resolution

**Description** Options related to resolution using tunnels in the tunnel table

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution](#)

**Tree** [tunnel-resolution](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mode *keyword*

<b>Description</b>	Mode to control the order of tunnel resolution compared to route resolution
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution mode keyword</a>
<b>Tree</b>	<a href="#">mode</a>
<b>Default</b>	disabled
<b>Options</b>	<ul style="list-style-type: none"> <li>• prefer</li> <li>• require</li> <li>• disabled</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tag

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref ipv6-unicast next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **I3vpn-ipv4-unicast**

<b>Description</b>	Options related to the VPN-IPv4 unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast</a>
<b>Tree</b>	<a href="#">I3vpn-ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref I3vpn-ipv4-unicast advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## convergence

**Description** Options for controlling and monitoring routing convergence of the relevant address family

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence](#)

**Tree** [convergence](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## converged-peers *number*

**Description** The number of peers that have sent an EOR marker for the address family since the last BGP restart

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence converged-peers](#) *number*

**Tree** [converged-peers](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## convergence-state *keyword*

**Description** Enter the convergence-state context

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence convergence-state](#) *keyword*

**Tree** [convergence-state](#)

**Options**

- waiting  
BGP has recently restarted and no sessions have re-established yet
- started

BGP has recently restarted and at least one session has re-established with support of the address family

- partial

BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.

- timeout

BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired

- converged

All non-slow peers that support the address family have have advertised the End-of-RIB marker for the address family

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### convergence-time number

**Description**

The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family

**Context**

[network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence convergence-time](#) *number*

**Tree**

[convergence-time](#)

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### first-up-peer-time number

**Description**

The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted

**Context**

[network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence first-up-peer-time](#) *number*

**Tree**

[first-up-peer-time](#)

**Configurable**

False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-up-peer-time *number*

**Description** The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence last-up-peer-time](#) *number*

**Tree** [last-up-peer-time](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-wait-to-advertise *number*

**Description** The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer

The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.

**Context** [network-instance name](#) *string* [protocols bgp afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv4-unicast convergence max-wait-to-advertise](#) *number*

**Tree** [max-wait-to-advertise](#)

**Range** 0 to 3600

**Default** 0

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**oper-max-wait-to-advertise** *number*

<b>Description</b>	The operational value of the max-wait-to-advertise timer for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">convergence</a> <a href="#">oper-max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-max-wait-to-advertise</a>
<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">convergence</a> <a href="#">up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">convergence</a> <a href="#">up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**inter-as-vpn** *boolean*

<b>Description</b>	When set to true, received VPN-IPv4 routes that are not imported by any network-instance are retained in the BGP RIB and considered 'used' so that they can be propagated to any EBGP or IBGP peer.  This command supersedes the effect of keep-all-routes. This command triggers the programming of a VPN label swap operation for each received VPN-IPv4 route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">inter-as-vpn</a> <i>boolean</i>
<b>Tree</b>	<a href="#">inter-as-vpn</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**keep-all-routes** *boolean*

<b>Description</b>	When this is set to true all received VPN-IPv4 routes are retained in the RIB-IN, even those not imported by any network-instance; these routes display as 'rejected' and cannot be propagated to other peers  When this is false, VPN-IPv4 routes that are not imported by any network-instance are dropped and not retained in the BGP RIB-IN; policy changes affecting received VPN-IPv4 routes will trigger the sending of ROUTE_REFRESH messages towards all VPN-IPv4 family peers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">keep-all-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">keep-all-routes</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-self-route-reflector** *boolean*

<b>Description</b>	When set to true, received VPN-IPv4 routes are kept in the RIB and readvertised to the other route reflector clients with a local next-hop and VPN label  This command triggers the programming of a VPN label swap operation for each received VPN-IPv4 route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv4-unicast next-hop-self-route-reflector</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-self-route-reflector</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rapid-update** *boolean*

<b>Description</b>	When true, vpn-ipv4 update messages are advertised immediately, bypassing the MRAI  When this is false, reachability updates and withdrawals are subject to the MRAI interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv4-unicast rapid-update</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rapid-update</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive-ipv6-next-hops** *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the
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scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### l3vpn-ipv6-unicast

<b>Description</b>	Options related to the VPN-IPv6 unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a>
<b>Tree</b>	<a href="#">l3vpn-ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### convergence

<b>Description</b>	Options for controlling and monitoring routing convergence of the relevant address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**converged-peers** *number*

<b>Description</b>	The number of peers that have sent an EOR marker for the address family since the last BGP restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv6-unicast convergence converged-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">converged-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**convergence-state** *keyword*

<b>Description</b>	Enter the convergence-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv6-unicast convergence convergence-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">convergence-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• waiting BGP has recently restarted and no sessions have re-established yet</li> <li>• started BGP has recently restarted and at least one session has re-established with support of the address family</li> <li>• partial BGP has recently restarted and at least one session has advertised an End-of-RIB marker for the address family.</li> <li>• timeout BGP has recently restarted and not all non-slow peers advertised an End-of-RIB marker for the address family before the max-wait-to-advertise timer expired</li> <li>• converged All non-slow peers that support the address family have have advertised the End-of-RIB marker for the address family</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**convergence-time** *number*

<b>Description</b>	The elapsed time in seconds, starting from the last BGP restart, to reach the converged state for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence convergence-time</a> <i>number</i>
<b>Tree</b>	<a href="#">convergence-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**first-up-peer-time** *number*

<b>Description</b>	The time when the first session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence first-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">first-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-up-peer-time** *number*

<b>Description</b>	The time when the last session supporting the address family came up, measured from the time that the BGP instance restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence last-up-peer-time</a> <i>number</i>
<b>Tree</b>	<a href="#">last-up-peer-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-wait-to-advertise** *number*

<b>Description</b>	The maximum amount of time, in seconds, measured from the time when the first session (configured or dynamic) that supports the address family comes up after a BGP restart, until BGP is allowed to advertise any routes in that address family to any peer  The value of this leaf must always be greater than or equal to the operational value of min-wait-to-advertise. The default value is 3x the value of min-wait-to-advertise. A value of 0 means the feature is disabled and there is no additional delay before advertising routes of the address family.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence</a> <a href="#">max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">max-wait-to-advertise</a>
<b>Range</b>	0 to 3600
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-max-wait-to-advertise** *number*

<b>Description</b>	The operational value of the max-wait-to-advertise timer for the address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence</a> <a href="#">oper-max-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-max-wait-to-advertise</a>
<b>Range</b>	0 to 10800
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-peers** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast convergence</a> <a href="#">up-peers</a> <i>number</i>

<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-peers-when-min-expired** *number*

<b>Description</b>	The number of BGP sessions (configured and dynamic) that support the address family and that were in established state when the win-wait-to-advertise timer expired
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast convergence up-peers-when-min-expired</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers-when-min-expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inter-as-vpn** *boolean*

<b>Description</b>	When set to true, received VPN-IPv6 routes that are not imported by any network-instance are retained in the BGP RIB and considered 'used' so that they can be propagated to any EBGP or IBGP peer.  This command supersedes the effect of keep-all-routes. This command triggers the programming of a VPN label swap operation for each received VPN-IPv6 route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast inter-as-vpn</a> <i>boolean</i>
<b>Tree</b>	<a href="#">inter-as-vpn</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**keep-all-routes** *boolean*

<b>Description</b>	<p>When this is set to true all received VPN-IPv6 routes are retained in the RIB-IN, even those not imported by any network-instance; these routes display as 'rejected' and cannot be propagated to other peers</p> <p>When this is false, VPN-IPv6 routes that are not imported by any network-instance are dropped and not retained in the BGP RIB-IN; policy changes affecting received VPN-IPv6 routes will trigger the sending of ROUTE_REFRESH messages towards all VPN-IPv6 family peers.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv6-unicast</a> <a href="#">keep-all-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">keep-all-routes</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-self-route-reflector** *boolean*

<b>Description</b>	<p>When set to true, received VPN-IPv6 routes are kept in the RIB and readvertised to the other route reflector clients with a local next-hop and VPN label</p> <p>This command triggers the programming of a VPN label swap operation for each received VPN-IPv6 route.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref l3vpn-ipv6-unicast</a> <a href="#">next-hop-self-route-reflector</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-self-route-reflector</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rapid-update** *boolean*

<b>Description</b>	When true, vpn-ipv6 update messages are advertised immediately, bypassing the MRAI
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When this is false, reachability updates and withdrawals are subject to the MRAI interval.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast rapid-update</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rapid-update</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multipath

<b>Description</b>	Options related to BGP multipath
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">multipath</a>
<b>Tree</b>	<a href="#">multipath</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## allow-multiple-as *boolean*

<b>Description</b>	When set to true, BGP is allowed to build a multipath set using BGP routes with different neighbor AS (most recent AS in the AS_PATH) When set to false, BGP is only allowed to use non-best paths for ECMP if they meet the multipath criteria and they have the same neighbor AS as the best path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">multipath allow-multiple-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">allow-multiple-as</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## maximum-paths *number*

<b>Description</b>	The maximum number of BGP ECMP next-hops for BGP routes with an NLRI belonging to the address family of this configuration context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref multipath maximum-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-paths</a>
<b>Range</b>	1 to 256
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-routes** *number*

<b>Description</b>	The total number of routes belonging to this AFI/SAFI received from all peers of the BGP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp afi-safi afi-safi-name</a> <a href="#">identityref received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">received-routes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **as-path-options**

<b>Description</b>	Options for handling the AS_PATH in received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options</a>
<b>Tree</b>	<a href="#">as-path-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **allow-own-as** *number*

<b>Description</b>	The maximum number of times the global AS number or a local AS number of the BGP instance can appear in any received AS_PATH before it is considered a loop and considered invalid
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options allow-own-as</a> <i>number</i>
<b>Tree</b>	<a href="#">allow-own-as</a>

<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### remove-private-as

<b>Description</b>	Container with options for removing private AS numbers (2-byte and 4-byte) from the advertised AS path towards all peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options remove-private-as</a>
<b>Tree</b>	<a href="#">remove-private-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ignore-peer-as *boolean*

<b>Description</b>	If set to true then do not delete or replace a private AS number that is the same as the peer AS number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options remove-private-as ignore-peer-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-peer-as</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### leading-only *boolean*

<b>Description</b>	If set to true then only delete or replace private AS numbers that appear before the first occurrence of a non-private ASN in the sequence of most recent ASNs in the AS path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options remove-private-as leading-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leading-only</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mode** *keyword*

<b>Description</b>	The method by which private AS numbers are removed from the advertised AS_PATH attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp as-path-options remove-private-as mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Default</b>	disabled
<b>Options</b>	<ul style="list-style-type: none"> <li>disabled Do not strip or replace any private AS numbers</li> <li>delete Delete private AS numbers, shortening the AS path</li> <li>replace Replace private AS numbers with the local AS number used towards the peer, maintaining the AS path length</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container with authentication options that apply to all peers of the BGP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**keychain** *reference*

<b>Description</b>	Reference to a keychain. The keychain type must be tcp-md5.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp authentication keychain reference</a>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**password *string***

<b>Description</b>	Configures an MD5 authentication password for use with neighboring devices.
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols bgp authentication password <i>string</i></a>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**autonomous-system *number***

<b>Description</b>	The global AS number of the BGP instance Values greater than 65535 must be entered in ASPLAIN format.
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols bgp autonomous-system <i>number</i></a>
<b>Tree</b>	<a href="#">autonomous-system</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**best-path-selection**

<b>Description</b>	Container with options that control the BGP decision process (tie break between routes for the same NLRI).
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols bgp best-path-selection</a>
<b>Tree</b>	<a href="#">best-path-selection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-inactive *boolean***

<b>Description</b>	Advertise the best BGP route even if it is inactive due to the programming of a better non-BGP route
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp best-path-selection advertise-inactive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-inactive</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **always-compare-med** *boolean*

<b>Description</b>	Compare multi-exit discriminator (MED) value from different ASes when selecting the best route. The default behavior is to only compare MEDs for paths received from the same AS.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp best-path-selection always-compare-med</a> <i>boolean</i>
<b>Tree</b>	<a href="#">always-compare-med</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bgp-label**

<b>Description</b>	Enable the bgp-label context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp bgp-label</a>
<b>Tree</b>	<a href="#">bgp-label</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bgp-ipvpn**

<b>Description</b>	Enter the bgp-ipvpn context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp bgp-label bgp-ipvpn</a>
<b>Tree</b>	<a href="#">bgp-ipvpn</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop-resolution

<b>Description</b>	Options for controlling next-hop resolution procedures
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-next-hops

<b>Description</b>	Options related to the resolution of BGP next-hops that are IPv4 addresses
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a>
<b>Tree</b>	<a href="#">ipv4-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

<b>Description</b>	Options related to resolution using IP routes in the FIB
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a>
<b>Tree</b>	<a href="#">route-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ignore-default-routes *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">route-resolution</a> <a href="#">ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv4-next-hops</a> <a href="#">tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv4-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

**Description** Attributes for narrowing the selection of tunnels

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes](#)

**Tree** [selection-attributes](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

**Description** Next-hop resolution constraints based on internal tags

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag](#)

**Tree** [tag](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mandatory *boolean*

**Description** If true, a tunnel can resolve the next-hop only if it has all the same tags as the route

If false, it is possible to select a tunnel that has none or only some of the same tags as the route.

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv4-next-hops tunnel-resolution selection-attributes tag mandatory](#) *boolean*

**Tree** [mandatory](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-next-hops

**Description** Options related to the resolution of BGP next-hops that are IPv6 addresses

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops](#)

**Tree** [ipv6-next-hops](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-resolution

**Description** Options related to resolution using IP routes in the FIB

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops route-resolution](#)

**Tree** [route-resolution](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Enable or disable route resolution if no resolving tunnel is found
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">route-resolution</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ignore-default-routes *boolean*

<b>Description</b>	Ignore default routes, regardless of route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">route-resolution</a> <a href="#">ignore-default-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-default-routes</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel-resolution

<b>Description</b>	Options related to resolution using tunnels in the tunnel table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp</a> <a href="#">bgp-label</a> <a href="#">bgp-ipvpn</a> <a href="#">next-hop-resolution</a> <a href="#">ipv6-next-hops</a> <a href="#">tunnel-resolution</a>
<b>Tree</b>	<a href="#">tunnel-resolution</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-tunnel-types *identityref*

**Description** List of allowed tunnel types

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops tunnel-resolution allowed-tunnel-types](#) *identityref*

**Tree** [allowed-tunnel-types](#)

**Options**

- [bgp-next-hop-resolution-tunnel-type](#)  
Base type for the types of tunnels that can be used by BGP for next-hop resolution

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### selection-attributes

**Description** Attributes for narrowing the selection of tunnels

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes](#)

**Tree** [selection-attributes](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag

**Description** Next-hop resolution constraints based on internal tags

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag](#)

**Tree** [tag](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mandatory *boolean*

**Description** If true, a tunnel can resolve the next-hop only if it has all the same tags as the route

If false, it is possible to select a tunnel that has none or only some of the same tags as the route.

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-ipvpn next-hop-resolution ipv6-next-hops tunnel-resolution selection-attributes tag mandatory](#) *boolean*

**Tree** [mandatory](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bgp-vpn

**Description** Enter the bgp-vpn context

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-vpn](#)

**Tree** [bgp-vpn](#)

**Configurable** True

**Platforms** Supported on 7250 IXR and 7730 SXR

### dynamic-label-block *reference*

**Description** Reference to a dynamic label block used for non-local BGP VPN routes advertised with next-hop-self

**Context** [network-instance name](#) *string* [protocols bgp bgp-label bgp-vpn dynamic-label-block](#) *reference*

**Tree** [dynamic-label-block](#)

**Reference** [system mpls label-ranges dynamic name](#) *string*

**Configurable** True

**Platforms** Supported on 7250 IXR and 7730 SXR

**dynamic-label-block-status** *keyword*

<b>Description</b>	Status of the label block. The label block may show as unavailable if there is pending cleanup.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp bgp-label bgp-vpn dynamic-label-block-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">dynamic-label-block-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• available</li> <li>• unavailable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7250 IXR and 7730 SXR

**convergence**

<b>Description</b>	Options for configuring address family independent BGP convergence parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp convergence</a>
<b>Tree</b>	<a href="#">convergence</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**min-wait-to-advertise** *number*

<b>Description</b>	<p>The minimum amount of time, in seconds, measured from the moment when the first session (configured or dynamic) comes up after a BGP restart, until BGP is allowed to advertise any routes to any peer</p> <p>The sessions that are established when this timer expires determines the set of peers from which EOR is expected in order to declare convergence for an address family. A value of 0 means the feature is disabled and all routes are advertised immediately.</p> <p>This timer and associated state machine are only restarted by one of the following triggers:</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp convergence min-wait-to-advertise</a> <i>number</i>
<b>Tree</b>	<a href="#">min-wait-to-advertise</a>
<b>Range</b>	0 to 3600
<b>Default</b>	0
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## dynamic-neighbors

**Description** Options related to the acceptance and initiation of dynamic BGP sessions

**Context** [network-instance name](#) *string* [protocols bgp dynamic-neighbors](#)

**Tree** [dynamic-neighbors](#)

**Configurable** True

**Platforms** Supported on all platforms

## accept

**Description** Options related to the acceptance of dynamic BGP sessions from remote peers

**Context** [network-instance name](#) *string* [protocols bgp dynamic-neighbors accept](#)

**Tree** [accept](#)

**Configurable** True

**Platforms** Supported on all platforms

## match [prefix](#) (*ipv4-prefix | ipv6-prefix*)

**Description** List of prefix and group-id combinations from which incoming TCP connections to port 179 will be accepted

An incoming TCP connection to port 179 is matched to a list entry if: (a) the source IP does not match a configured BGP neighbor address (b) the list entry prefix is the longest prefix match of the source IP. (c) the source IP is not an IPv6 link-local address associated with an (unnumbered) interface configured for dynamic-neighbor sessions.

**Context** [network-instance name](#) *string* [protocols bgp dynamic-neighbors accept match prefix](#) (*ipv4-prefix | ipv6-prefix*)

**Tree** [match](#)

**Configurable** True

**Platforms** Supported on all platforms

## [prefix](#) (*ipv4-prefix | ipv6-prefix*)

**Description** The IP prefix used to match an incoming dynamic BGP session to a group.



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors accept match prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **allowed-peer-as** *string*

<b>Description</b>	<p>The allowed AS numbers that can establish incoming BGP sessions from this prefix and group-id-range combination</p> <p>If the OPEN message from a peer matched to this prefix contains a MyAS number that is not in this allowed list then a NOTIFICATION is sent to the peer with the indication Bad Peer AS. Each entry in this list can be a single AS number or a range of AS numbers in the format as1..as2</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors accept match prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">allowed-peer-as</a> <i>string</i>
<b>Tree</b>	<a href="#">allowed-peer-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### **peer-group** *reference*

<b>Description</b>	<p>Reference to a peer-group</p> <p>When an incoming session is matched to this list entry it is associated with the peer-group referenced by this leaf. The peer-group provides all the parameters needed to complete the establishment of the dynamic session. If the referenced peer-group has a configured peer-as this is ignored by dynamic BGP sessions using the group as a template.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors accept match prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">peer-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">peer-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group</a> <a href="#">group-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **max-sessions** *number*

<b>Description</b>	The maximum number of incoming BGP sessions that will be accepted by the router
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A value of 0 means no limit.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors accept max-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">max-sessions</a>
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### interface [interface-name](#) *string*

<b>Description</b>	List of interfaces on which dynamic sessions based on IPv6 link-local address discovery are accepted and initiated.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

<b>Description</b>	<p>Reference to a specific subinterface of the form &lt;interface-name&gt;.&lt;subinterface-index&gt;</p> <p>The referenced subinterface should be enabled for IPv6 and should be configured to accept and send IPv6 router advertisement messages. The referenced subinterface does not need any IPv4 addresses or global-unicast IPv6 addresses (i.e. it can be an unnumbered interface).</p> <p>When a subinterface is present in this list, incoming TCP connections to the BGP well-known port that are received on this subinterface and sourced from an IPv6 link local address and destined for the IPv6 link local address of the subinterface are automatically accepted.</p> <p>When a subinterface is present in this list, received IPv6 router advertisement messages on this subinterface automatically trigger BGP session setup towards the sender of these messages, if there is not already an established session.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allowed-peer-as *string*

**Description** Specifies the allowed AS numbers of dynamic BGP neighbors on this interface. If the OPEN message from a peer on this interface contains a MyAS number that is not in this allowed list then a NOTIFICATION is sent to the peer with the indication Bad Peer AS. Each entry in this list can be a single AS number or a range of AS numbers in the string format as1..as2.

**Context** [network-instance name](#) *string* [protocols bgp dynamic-neighbors interface interface-name](#) *string* [allowed-peer-as](#) *string*

**Tree** [allowed-peer-as](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 32

### max-sessions *number*

**Description** The maximum number of dynamic sessions that are allowed to be setup on the interface as a result of accepting sessions from link-local addresses or initiating sessions by means of receiving IPv6 router advertisements.

**Context** [network-instance name](#) *string* [protocols bgp dynamic-neighbors interface interface-name](#) *string* [max-sessions](#) *number*

**Tree** [max-sessions](#)

**Default** 1

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peer-group *reference*

**Description** Reference to a peer-group Specifies the peer-group to associate with dynamic BGP neighbors on this interface. The peer-group provides all the parameters needed to complete the establishment of the dynamic session.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp dynamic-neighbors interface interface-name</a> <i>string</i> <a href="#">peer-group reference</a>
<b>Tree</b>	<a href="#">peer-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ebgp-default-policy

<b>Description</b>	Options for controlling the default policies that apply to EBGp sessions
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp ebgp-default-policy</a>
<b>Tree</b>	<a href="#">ebgp-default-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### export-reject-all *boolean*

<b>Description</b>	When set to true, all outbound routes towards any EBGp peer to which no explicit export policy is applied are treated as though they were rejected by policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp ebgp-default-policy export-reject-all</a> <i>boolean</i>
<b>Tree</b>	<a href="#">export-reject-all</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### import-reject-all *boolean*

<b>Description</b>	When set to true, all inbound routes from any EBGp peer to which no explicit import policy is applied are treated as though they were rejected by policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp ebgp-default-policy import-reject-all</a> <i>boolean</i>
<b>Tree</b>	<a href="#">import-reject-all</a>
<b>Default</b>	true

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp export-policy reference</a>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

### **failure-detection**

<b>Description</b>	Options related to methods of detecting BGP session failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp failure-detection</a>
<b>Tree</b>	<a href="#">failure-detection</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **enable-bfd** *boolean*

<b>Description</b>	The true setting enables Bi-directional Forwarding Detection on BGP sessions belonging to the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp failure-detection enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fast-failover** *boolean*

<b>Description</b>	The true setting causes EBGP and IBGP sessions to drop immediately (and not wait for hold timer expiry) when the local interface that they depend upon for neighbor reachability goes down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp failure-detection fast-failover</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fast-failover</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**graceful-restart**

<b>Description</b>	Options for controlling the behavior of the router as a graceful restart helper
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable graceful restart helper for all address families
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp graceful-restart admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**requested-restart-time** *number*

<b>Description</b>	The restart time encoded in this router's GR capability.
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If the neighbor honors this request then this is the maximum time allowed for this router to re-establish its TCP connection after a restart. If this time is exceeded, the neighbor is expected to flush stale routes that it was maintaining on behalf of this router.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp graceful-restart requested-restart-time</a> <i>number</i>
<b>Tree</b>	<a href="#">requested-restart-time</a>
<b>Range</b>	1 to 3600
<b>Default</b>	300
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stale-routes-time** *number*

<b>Description</b>	The maximum number of seconds that routes received from a helped peer remain stale until they are deleted  Routes of AFI/SAFI X received from peer Y are marked stale when peer Y goes down and its previous GR capability included AFI/SAFI X.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp graceful-restart stale-routes-time</a> <i>number</i>
<b>Tree</b>	<a href="#">stale-routes-time</a>
<b>Range</b>	1 to 3600
<b>Default</b>	360
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **group** [group-name](#) *string*

<b>Description</b>	Peer group templates
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**group-name** *string*

<b>Description</b>	The configured name of the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the peer group  Disable will tear down all the BGP sessions in the group, even if they are administratively enabled at the neighbor level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**afi-safi** [afi-safi-name](#) *identityref*

<b>Description</b>	List of address families supported by the BGP peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">afi-safi</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**afi-safi-name** *identityref*

<b>Description</b>	The name of a BGP address family, which translates to a specific AFI value and a specific SAFI value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>



**Options**

- ipv4-unicast  
Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)
- ipv6-unicast  
Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)
- l3vpn-ipv4-unicast  
VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)
- l3vpn-ipv6-unicast  
VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)
- ipv4-labeled-unicast  
Labeled IPv4 unicast routes (AFI 1, SAFI 4)
- ipv6-labeled-unicast  
Labeled IPv6 unicast routes (AFI 2, SAFI 4)
- evpn  
EVPN routes (AFI = 25, SAFI = 70)
- route-target  
Route target constraint routes (AFI 1, SAFI 132)
- sr-policy-ipv4  
SR-TE Policy (AFI 1, SAFI 73)
- sr-policy-ipv6  
SR-TE Policy (AFI 2, SAFI 73)

**Configurable**

True

**Platforms**

Supported on all platforms

**add-paths****Description**

Configure support for the advertisement and receipt of multiple paths for the AFI/SAFI

**Context**

[network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [add-paths](#)

**Tree**

[add-paths](#)

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive** *boolean*

<b>Description</b>	Enable capability negotiation to receive multiple path advertisements from a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">receive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send** *boolean*

<b>Description</b>	Enable capability negotiation to send multiple path advertisements to a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">send</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-max** *number*

<b>Description</b>	Send the N best paths for a single NLRI, or as many as possible until there are no more valid paths to send.  This ensures the best path is advertised but does not limit the additional paths to being 'used' paths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">send-max</a> <i>number</i>
<b>Tree</b>	<a href="#">send-max</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## send-multipath

<b>Description</b>	Send the used paths for a single NLRI, including all paths that are multipaths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">add-paths send-multipath</a>
<b>Tree</b>	<a href="#">send-multipath</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	This leaf indicates whether the AFI-SAFI is enabled for the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## evpn

<b>Description</b>	Options related to the EVPN address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of EVPN routes with IPv6 next-hops to peers in the peer-group  If this is set to true and the local-address used towards the peer is an IPv6 address and BGP is supposed to apply next-hop-self then the route is advertised with the IPv6 local-address as the BGP next-hop. If this is set to false, then the EVPN route is advertised with an IPv4 next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**default-received-encapsulation** *keyword*

<b>Description</b>	Indicates the encapsulation considered when the routes are received without BGP encapsulation extended community  Most EVPN routes are usually received with a BGP encapsulation extended community that indicates the encapsulation and therefore how to interpret the value in the received Label fields of the routes. If no encapsulation is received, BGP will validate the route as MPLS or VXLAN or SRv6 depending on how this command is configured.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn default-received-encapsulation</a> <i>keyword</i>
<b>Tree</b>	<a href="#">default-received-encapsulation</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-limit-accepted**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">evpn prefix-limit-accepted</a>

<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">evpn</a> <a href="#">prefix-limit-accepted</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">evpn</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">evpn</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">evpn prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">evpn prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 14

### import-policy *reference*

**Description** Apply an import policy to received BGP routes

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [import-policy reference](#)

**Tree** [import-policy](#)

**Reference** [routing-policy policy name](#) *string*

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 14

### ipv4-labeled-unicast

**Description** Options related to the labeled-IPv4-unicast address family

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv4-labeled-unicast](#)

**Tree** [ipv4-labeled-unicast](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertise-ipv6-next-hops *boolean*

**Description** Enables advertisement of IPv4 routes with IPv6 next-hops

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv4-labeled-unicast advertise-ipv6-next-hops](#) *boolean*

**Tree** [advertise-ipv6-next-hops](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-limit-accepted**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-accepted max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-accepted prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-accepted warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-received

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prevent-teardown *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **receive-ipv6-next-hops** *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-labeled-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-unicast

<b>Description</b>	Options related to the IPv4-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## advertise-ipv6-next-hops *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## link-bandwidth

<b>Description</b>	Enter the link-bandwidth context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast link-bandwidth</a>
<b>Tree</b>	<a href="#">link-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## add-next-hop-count-to-received-bgp-routes (*number* | *keyword*)

<b>Description</b>	Determines the weight that is internally added to the received PE-CE BGP routes  The configured weight is added to all received BGP PE-CE routes for the purpose of EVPN unequal ECMP. This weight is internal and not added into any link-bandwidth extended community when readvertising the received routes to other ipv4 or ipv6 neighbors.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast link-bandwidth add-next-hop-count-to-received-bgp-routes</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">add-next-hop-count-to-received-bgp-routes</a>
<b>Range</b>	1 to 128
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>disable</code></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-accepted max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prevent-teardown *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-accepted prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-accepted warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>

<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### prevent-teardown *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### receive-ipv6-next-hops *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared
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to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv4-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ipv6-labeled-unicast

<b>Description</b>	Options related to the labeled IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv6-labeled-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

## max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast prefix-limit-accepted max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prevent-teardown *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast prefix-limit-accepted prevent-teardown](#) *boolean*

**Tree** [prevent-teardown](#)

**Default** false

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### warning-threshold-pct *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast prefix-limit-accepted warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Default** 90

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-received

**Description** Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-labeled-unicast prefix-limit-received](#)

**Tree** [prefix-limit-received](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-labeled-unicast prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-unicast

<b>Description</b>	Options related to the IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## link-bandwidth

<b>Description</b>	Enter the link-bandwidth context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast link-bandwidth</a>
<b>Tree</b>	<a href="#">link-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## add-next-hop-count-to-received-bgp-routes (*number* | *keyword*)

<b>Description</b>	<p>Determines the weight that is internally added to the received PE-CE BGP routes</p> <p>The configured weight is added to all received BGP PE-CE routes for the purpose of EVPN unequal ECMP. This weight is internal and not added into any link-bandwidth extended community when readvertising the received routes to other ipv4 or ipv6 neighbors.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast link-bandwidth add-next-hop-count-to-received-bgp-routes</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">add-next-hop-count-to-received-bgp-routes</a>
<b>Range</b>	1 to 128
<b>Options</b>	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

**Description** Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-unicast prefix-limit-accepted](#)

**Tree** [prefix-limit-accepted](#)

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

**Description** Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-unicast prefix-limit-accepted max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prevent-teardown *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [ipv6-unicast prefix-limit-accepted prevent-teardown](#) *boolean*

**Tree** [prevent-teardown](#)

**Default** false

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast prefix-limit-accepted warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">ipv6-unicast prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**I3vpn-ipv4-unicast**

<b>Description</b>	Options related to the VPN-IPv4 unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">I3vpn-ipv4-unicast</a>
<b>Tree</b>	<a href="#">I3vpn-ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-limit-accepted**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### receive-ipv6-next-hops *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv4-unicast receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### l3vpn-ipv6-unicast

<b>Description</b>	Options related to the VPN-IPv6 unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast</a>
<b>Tree</b>	<a href="#">l3vpn-ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **max-received-routes** *number*

**Description** Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv6-unicast prefix-limit-accepted max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prevent-teardown** *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv6-unicast prefix-limit-accepted prevent-teardown](#) *boolean*

**Tree** [prevent-teardown](#)

**Default** false

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [l3vpn-ipv6-unicast prefix-limit-accepted warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Default** 90

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">l3vpn-ipv6-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi](#) [afi-safi-name](#) *identityref* [l3vpn-ipv6-unicast prefix-limit-received warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Default** 90

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### route-target

**Description** Options related to the RT constraint address family

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi](#) [afi-safi-name](#) *identityref* [route-target](#)

**Tree** [route-target](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

**Description** Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from each peer in the group

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi](#) [afi-safi-name](#) *identityref* [route-target prefix-limit-accepted](#)

**Tree** [prefix-limit-accepted](#)

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **max-received-routes** *number*

**Description** Maximum number of routes allowed from each peer, counting ONLY routes accepted by import policies

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [route-target prefix-limit-accepted max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prevent-teardown** *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [route-target prefix-limit-accepted prevent-teardown](#) *boolean*

**Tree** [prevent-teardown](#)

**Default** false

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [afi-safi afi-safi-name](#) *identityref* [route-target prefix-limit-accepted warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Default** 90

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">route-target prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from each peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">route-target prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">route-target prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">route-target prefix-limit-received warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-default-route *boolean*

<b>Description</b>	When true the router advertises a synthetically generated default RTC route to each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">afi-safi afi-safi-name</a> <i>identityref</i> <a href="#">route-target send-default-route</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send-default-route</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### as-path-options

<b>Description</b>	Options for handling the AS_PATH in received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options</a>
<b>Tree</b>	<a href="#">as-path-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**allow-own-as** *number*

<b>Description</b>	The maximum number of times the global AS number or a local AS number of the BGP instance can appear in any received AS_PATH before it is considered a loop and considered invalid  When this value is changed the new value applies only to the routes received after the change is committed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options allow-own-as</a> <i>number</i>
<b>Tree</b>	<a href="#">allow-own-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**remove-private-as**

<b>Description</b>	Container with options for removing private AS numbers (2-byte and 4-byte) from the advertised AS path towards all peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options remove-private-as</a>
<b>Tree</b>	<a href="#">remove-private-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ignore-peer-as** *boolean*

<b>Description</b>	If set to true then do not delete or replace a private AS number that is the same as the peer AS number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options remove-private-as ignore-peer-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-peer-as</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**leading-only** *boolean*

<b>Description</b>	If set to true then only delete or replace private AS numbers that appear before the first occurrence of a non-private ASN in the sequence of most recent ASNs in the AS path
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options remove-private-as leading-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leading-only</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mode** *keyword*

<b>Description</b>	The method by which private AS numbers are removed from the advertised AS_PATH attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options remove-private-as mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• disabled Do not strip or replace any private AS numbers</li> <li>• delete Delete private AS numbers, shortening the AS path</li> <li>• replace Replace private AS numbers with the local AS number used towards the peer, maintaining the AS path length</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**replace-peer-as** *boolean*

<b>Description</b>	If set to true then replace every occurrence of the peer AS number that is present in the advertised AS path with the local AS number used towards the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">as-path-options replace-peer-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">replace-peer-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container with authentication options that apply to all peers in this peer-group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**keychain *reference***

<b>Description</b>	Reference to a keychain. The keychain type must be tcp-md5.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">authentication keychain</a> <i>reference</i>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**password *string***

<b>Description</b>	Configures an MD5 authentication password for use with neighboring devices.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">authentication password</a> <i>string</i>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description *string***

<b>Description</b>	A user provided description string for the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">description</a> <i>string</i>

<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">export-policy reference</a>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

### **failure-detection**

<b>Description</b>	Options related to methods of detecting BGP session failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">failure-detection</a>
<b>Tree</b>	<a href="#">failure-detection</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **enable-bfd** *boolean*

<b>Description</b>	The true setting enables Bi-directional Forwarding Detection on BGP sessions belonging to the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">failure-detection enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fast-failover** *boolean*

<b>Description</b>	The true setting causes EBGP and IBGP sessions in the peer group to drop immediately (and not wait for hold timer expiry) when the local interface that they depend upon for neighbor reachability goes down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">failure-detection fast-failover</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fast-failover</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**graceful-restart**

<b>Description</b>	Options related to router behavior as a graceful restart helper
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable graceful restart helper for all address families
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">graceful-restart admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**requested-restart-time** *number*

<b>Description</b>	<p>The restart time encoded in this router's GR capability.</p> <p>If the neighbor honors this request then this is the maximum time allowed for this router to re-establish its TCP connection after a restart. If this time</p>
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is exceeded, the neighbor is expected to flush stale routes that it was maintaining on behalf of this router.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">graceful-restart requested-restart-time</a> <i>number</i>
<b>Tree</b>	<a href="#">requested-restart-time</a>
<b>Range</b>	1 to 3600
<b>Default</b>	300
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stale-routes-time** *number*

<b>Description</b>	The maximum number of seconds that routes received from a neighbor that is being helped remain stale until they are deleted.  Routes of AFI/SAFI X received from peer Y are marked stale when peer Y goes down and its previous GR capability included AFI/SAFI X.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">graceful-restart stale-routes-time</a> <i>number</i>
<b>Tree</b>	<a href="#">stale-routes-time</a>
<b>Range</b>	1 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **import-policy** *reference*

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

## local-as

<b>Description</b>	Options related to the local autonomous-system number advertised by this router to its peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">local-as</a>
<b>Tree</b>	<a href="#">local-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## as-number *number*

<b>Description</b>	The local autonomous system number used to override the global ASN on this group of BGP sessions  Sets the ASN value that this router sends in its OPEN message towards its peer in the group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">local-as as-number</a> <i>number</i>
<b>Tree</b>	<a href="#">as-number</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## prepend-global-as *boolean*

<b>Description</b>	When set to true, the global ASN value is prepended to the AS path in outbound routes towards each BGP peer in the group  If a session is EBGP (peer-as is not equal to the local-as) then the local-as is prepended as the final step, so that the local-as is the first element in the AS_PATH received by the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">local-as prepend-global-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prepend-global-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prepend-local-as** *boolean*

<b>Description</b>	When set to true, the local AS value is prepended to the AS path of inbound routes from each EBGP peer belonging to the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">local-as prepend-local-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prepend-local-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**local-preference** *number*

<b>Description</b>	The value of the local-preference attribute that is added to received routes from EBGP peers in the group  It is also used to encode the local preference attribute for locally generated BGP routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">local-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">local-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance-group** *string*

<b>Description</b>	State field to display the maintenance group to which this group belongs to.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">maintenance-group</a> <i>string</i>
<b>Tree</b>	<a href="#">maintenance-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**multihop**

<b>Description</b>	Configuration parameters specifying the multihop behaviour for IBGP and EBGP peers in the peer group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">multihop</a>
<b>Tree</b>	<a href="#">multihop</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	<p>When enabled, IBGP and EBGP peers in the group are allowed to be indirectly connected by up to N hops, where N is controlled by the maximum-hops parameter. When disabled, only IBGP peers within the peer group support multihop.</p> <p>This can be overridden on a per neighbor basis. It is inherited by neighbors in the peer-group only if maximum-hops is also specified.</p> <p>By default this is disabled.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">multihop admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **maximum-hops** *number*

<b>Description</b>	<p>This sets the maximum number of routing hops towards each peer. It determines the IP TTL value in originated BGP TCP/IP packets. By default the TTL is set to 1 towards EBGP peers and 64 towards IBGP peers. This leaf sets a new IP TTL to use towards both EBGP and IBGP peers in the peer group.</p> <p>This can be overridden on a per neighbor basis. It is inherited by neighbors in the peer-group only if admin-state is also specified.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">multihop maximum-hops</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-hops</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**next-hop-self** *boolean*

<b>Description</b>	When set to true, the next-hop in all IPv4-unicast, IPv6-unicast, EVPN, VPN-IPv4 and VPN-IPv6 BGP routes advertised to all IBGP peers in the peer-group is set equal to the local-address used on each session (or to the router ID if the NLRI is IPv6 and there is no IPv6 local address to use). This is independent of the route origin (EBGP, IBGP-client, IBGP-non-client or redistributed direct/static/aggregate route).  When set to false, normal BGP rules from RFC 4271 apply.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">next-hop-self</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-self</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**optional-attributes**

<b>Description</b>	Enter the optional-attributes context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">optional-attributes</a>
<b>Tree</b>	<a href="#">optional-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**block-prefix-sid** *boolean*

<b>Description</b>	Remove the prefix SID optional transitive attribute in all received and sent routes to this peer, or group of peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">optional-attributes block-prefix-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">block-prefix-sid</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-as** *number*

<b>Description</b>	The autonomous system number expected from each peer in the group A configured session with a peer does not come up if this value does not match the AS value reported by the peer in its OPEN message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-reflector**

<b>Description</b>	Container with route reflection configuration options.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">route-reflector</a>
<b>Tree</b>	<a href="#">route-reflector</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**client** *boolean*

<b>Description</b>	When this is set to true all configured and dynamic BGP sessions that belong to the peer-group are considered RR clients.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">route-reflector client</a> <i>boolean</i>
<b>Tree</b>	<a href="#">client</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**cluster-id** (*number* | *dotted-quad*)

<b>Description</b>	The cluster-id to insert into the CLUSTER_LIST attribute when reflecting routes received by or sent to each client in the peer-group. The default is inherited from instance level configuration.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">route-reflector cluster-id</a> ( <i>number</i>   <i>dotted-quad</i> )

<b>Tree</b>	<a href="#">cluster-id</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### send-default-route

<b>Description</b>	Options for controlling the generation of default routes towards group peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">send-default-route</a>
<b>Tree</b>	<a href="#">send-default-route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### export-policy *reference*

<b>Description</b>	The name of a policy that should be applied to the advertised default routes, in order to set their attributes to non-default values Only the default-action of this policy is parsed and applied.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">send-default-route export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ipv4-unicast *boolean*

<b>Description</b>	Enables the sending of a synthetically generated default IPv4 route [0/0] to each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">send-default-route ipv4-unicast</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-unicast** *boolean*

<b>Description</b>	Enables the sending of a synthetically generated default IPv6 route [::/0] to each peer in the group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">send-default-route ipv6-unicast</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Container for BGP statistics.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**disabled-peers** *number*

<b>Description</b>	The number of configured BGP peers associated with the peer-group that are administratively disabled
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics disabled-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">disabled-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**dynamic-peers** *number*

<b>Description</b>	The number of dynamic BGP peers associated with the peer-group that are currently in the established state, counting sessions resulting from accepted incoming TCP connections and outgoing TCP connections triggered by LLDP auto-discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics dynamic-peers</a> <i>number</i>

<b>Tree</b>	<a href="#">dynamic-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **path-memory** *number*

<b>Description</b>	The total number of bytes required to store the path attribute objects used by received BGP routes associated with the peer-group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics path-memory</a> <i>number</i>
<b>Tree</b>	<a href="#">path-memory</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-active-routes** *number*

<b>Description</b>	The total number of received BGP routes that are active (installed for forwarding) and associated with the peer-group, summed across all address families
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics total-active-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">total-active-routes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-paths** *number*

<b>Description</b>	The total number of path attribute objects used by received BGP routes associated with the peer-group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics total-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">total-paths</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-peers** *number*

<b>Description</b>	The total number of configured BGP peers associated with the peer-group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics total-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">total-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-prefixes** *number*

<b>Description</b>	The total number of unique NLRI contained in all received BGP routes associated with the BGP instance or the peer-group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics total-prefixes</a> <i>number</i>
<b>Tree</b>	<a href="#">total-prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-received-routes** *number*

<b>Description</b>	The total number of received BGP routes associated with the peer-group, summed across all address families
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics total-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">total-received-routes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**up-peers** *number*

<b>Description</b>	The number of configured BGP peers associated with the peer-group that are currently in the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">statistics up-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">up-peers</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

## timers

**Description** Enter the timers context

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [timers](#)

**Tree** [timers](#)

**Configurable** True

**Platforms** Supported on all platforms

## connect-retry *number*

**Description** The time interval in seconds between successive attempts to establish a session with a peer

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [timers connect-retry](#) *number*

**Tree** [connect-retry](#)

**Range** 1 to 65535

**Default** 120

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

## hold-time *number*

**Description** The hold-time interval in seconds that the router proposes to the peer in its OPEN message

The actual in-use hold-time is negotiated to the lowest value proposed by the two peers. A negotiated value of 0 suppresses the sending of keepalives by both peers.

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [timers hold-time](#) *number*

**Tree** [hold-time](#)

**Range** 0 | 3 to 65535

**Default** 90

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

### keepalive-interval *number*

**Description** The interval in seconds between successive keepalive messages sent to the peer

The period between one keepalive message and the next is the minimum of this configured value and 1/3 of the negotiated hold-time duration. A value of 0 suppresses the sending of keepalives to the peer.

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [timers keepalive-interval](#) *number*

**Tree** [keepalive-interval](#)

**Range** 0 to 21845

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

### minimum-advertisement-interval *number*

**Description** The value assigned to the MinRouteAdvertisementIntervalTimer of RFC 4271, for both EBGp and IBGP sessions

Each session runs its own independent timer and the timer affects both route advertisements and route withdrawals, regardless of address family. For route withdrawals only, this timer is bypassed if rapid-withdrawal is set to true.

**Context** [network-instance name](#) *string* [protocols bgp group group-name](#) *string* [timers minimum-advertisement-interval](#) *number*

**Tree** [minimum-advertisement-interval](#)

**Range** 1 to 255

**Default** 5

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

### prefix-limit-restart-timer *number*

**Description** Time interval in seconds after which the BGP session is re-established after being torn down due to exceeding any prefix limit (of any address family)



This only applies if prevent-teardown is false.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">timers prefix-limit-restart-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-limit-restart-timer</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace-options

<b>Description</b>	Debug traceoptions for BGP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## flag *name keyword*

<b>Description</b>	Tracing parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">trace-options flag name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flag</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## name *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">trace-options flag name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>events Trace all BGP events.</li> <li>packets</li> </ul>

- Trace all BGP protocol packets.
- open  
Trace BGP open packets.
- keepalive  
Trace BGP keepalive packets.
- graceful-restart  
Trace Graceful Restart events.
- timers  
Trace routing protocol timer processing.
- route  
Trace BGP route table manager.
- notification  
Trace Bgp notification.
- socket  
Trace socket info.
- update  
Trace update info.

**Configurable**

True

**Platforms**

Supported on all platforms

**modifier** *keyword***Description**

Enter the modifier context

**Context**

[network-instance name](#) *string* [protocols bgp group group-name](#) *string* [trace-options flag name](#) *keyword* [modifier](#) *keyword*

**Tree**[modifier](#)**Options**

- detail  
To enable detailed tracing. Includes both received and sent packets.
- receive  
To enable tracing for the packets which are received.
- send  
To enable tracing for the sent packets.

**Configurable**

True

**Platforms**

Supported on all platforms

**transport**

<b>Description</b>	Enter the transport context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**local-address** (*ipv4-address* | *ipv6-address* | *subinterface-all*)

<b>Description</b>	The local TCP endpoint of used for all BGP sessions in the group  This also the source address for next-hop-self, if it applies. The local-address can be specified as an IP address that is resolvable to a local interface.  This address must be the primary address of an interface, otherwise the session will not come up.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">transport local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>subinterface-all</i> )
<b>Tree</b>	<a href="#">local-address</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mtu-discovery** *boolean*

<b>Description</b>	Turns path mtu discovery for BGP TCP sessions on (true) or off (false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">transport mtu-discovery</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mtu-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**passive-mode** *boolean*

<b>Description</b>	The true setting causes BGP to wait for the peer to initiate the TCP connection The false setting causes BGP to initiate a TCP connection whenever the BGP session is started or restarted.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">transport passive-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">passive-mode</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tcp-mss** *number*

<b>Description</b>	The maximum segment size of BGP TCP packets The actual value used in the transmit direction towards a particular peer should be checked at the neighbor level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">transport tcp-mss</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-mss</a>
<b>Range</b>	536 to 9446
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**under-maintenance** *boolean*

<b>Description</b>	Indicates if this BGP group is in maintenance mode
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">under-maintenance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">under-maintenance</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**import-policy** *reference*

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

**local-preference** *number*

<b>Description</b>	The value of the local-preference attribute that is added to received routes from EBGp peers  It is also used to encode the local preference attribute for locally generated BGP routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp local-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">local-preference</a>
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance-group** *string*

<b>Description</b>	State field to display the maintenance group to which this bgp instance belongs to.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp maintenance-group</a> <i>string</i>
<b>Tree</b>	<a href="#">maintenance-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-ecmp-hash-buckets-per-next-hop-group** *number*

<b>Description</b>	Specifies the maximum number of ECMP hash buckets per next-hop-group Weighted ECMP weights are normalized based on this number of hash buckets.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp max-ecmp-hash-buckets-per-next-hop-group</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-hash-buckets-per-next-hop-group</a>
<b>Range</b>	1 to 256
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** [peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	Create a configured BGP session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> )
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **peer-address** ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#))

<b>Description</b>	The transport address of the BGP peer  The peer-address must be a valid IPv4 unicast address, IPv6 global unicast address or IPv6 link-local address. An IPv6 link-local address requires the interface scope to be identified, using a format such as fe80::1234%ethernet-1/1.1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the peer  Disable will tear down the BGP session (return it to IDLE state).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### advertised-capabilities *keyword*

<b>Description</b>	List of BGP capabilities advertised by the local routing device to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">advertised-capabilities</a> <i>keyword</i>
<b>Tree</b>	<a href="#">advertised-capabilities</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• MP_BGP</li> <li>• ROUTE_REFRESH</li> <li>• EXT_NH_ENCODING</li> <li>• GRACEFUL_RESTART</li> <li>• 4-OCTET_ASN</li> <li>• ORF_SEND_EXCOMM</li> <li>• ORF_RECEIVE_EXCOMM</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### afi-safi [afi-safi-name](#) *identityref*

<b>Description</b>	List of address families supported by the BGP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">afi-safi</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### afi-safi-name *identityref*

<b>Description</b>	The name of a BGP address family, which translates to a specific AFI value and a specific SAFI value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4-unicast Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> </ul>

- ipv6-unicast  
Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)
- l3vpn-ipv4-unicast  
VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)
- l3vpn-ipv6-unicast  
VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)
- ipv4-labeled-unicast  
Labeled IPv4 unicast routes (AFI 1, SAFI 4)
- ipv6-labeled-unicast  
Labeled IPv6 unicast routes (AFI 2, SAFI 4)
- evpn  
EVPN routes (AFI = 25, SAFI = 70)
- route-target  
Route target constraint routes (AFI 1, SAFI 132)
- sr-policy-ipv4  
SR-TE Policy (AFI 1, SAFI 73)
- sr-policy-ipv6  
SR-TE Policy (AFI 2, SAFI 73)

**Configurable**

True

**Platforms**

Supported on all platforms

**active-routes** *number***Description**

The number of routes belonging to this AFI/SAFI received from the peer that are installed and used, being best routes

**Context**

[network-instance name](#) *string* [protocols](#) [bgp neighbor peer-address](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref active-routes](#) *number*

**Tree**[active-routes](#)**Configurable**

False

**Platforms**

Supported on all platforms

**add-paths****Description**

Configure support for the advertisement and receipt of multiple paths for the AFI/SAFI



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a>
<b>Tree</b>	<a href="#">add-paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive** *boolean*

<b>Description</b>	Enable capability negotiation to receive multiple path advertisements from a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">receive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send** *boolean*

<b>Description</b>	Enable capability negotiation to send multiple path advertisements to a single peer for a single NLRI belonging to the AFI/SAFI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">send</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-max number**

<b>Description</b>	Send the N best paths for a single NLRI, or as many as possible until there are no more valid paths to send.  This ensures the best path is advertised but does not limit the additional paths to being 'used' paths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">send-max</a> <i>number</i>
<b>Tree</b>	<a href="#">send-max</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-multipath**

<b>Description</b>	Send the used paths for a single NLRI, including all paths that are multipaths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">add-paths</a> <a href="#">send-multipath</a>
<b>Tree</b>	<a href="#">send-multipath</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state keyword**

<b>Description</b>	This leaf indicates whether support for the AFI-SAFI is enabled/advertised to the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## evpn

<b>Description</b>	Options related to the EVPN address family
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) afi-safi afi-safi-name identityref evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## advertise-ipv6-next-hops *boolean*

<b>Description</b>	<p>Enables advertisement of EVPN routes with IPv6 next-hops to peers</p> <p>If this is set to true and the local-address used towards the peer is an IPv6 address and BGP is supposed to apply next-hop-self then the route is advertised with the IPv6 local-address as the BGP next-hop. If this is set to false, then the EVPN route is advertised with an IPv4 next-hop.</p>
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) afi-safi afi-safi-name identityref evpn advertise-ipv6-next-hops boolean</a>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## default-received-encapsulation *keyword*

<b>Description</b>	<p>Indicates the encapsulation considered when the routes are received without BGP encapsulation extended community</p> <p>Most EVPN routes are usually received with a BGP encapsulation extended community that indicates the encapsulation and therefore how to interpret the value in the received Label fields of the routes. If no encapsulation is received, BGP will validate the route as MPLS or VXLAN or SRv6 depending on how this command is configured.</p>
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) afi-safi afi-safi-name identityref evpn default-received-encapsulation keyword</a>

<b>Tree</b>	<a href="#">default-received-encapsulation</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn prefix-limit-accepted</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">prefix-limit-accepted</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">evpn</a> <a href="#">prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref evpn prefix-limit-received</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref evpn prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	14

### import-policy *reference*

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">import-policy reference</a>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	14

### ipv4-labeled-unicast

<b>Description</b>	Options related to the labeled IPv4-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv4-labeled-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertise-ipv6-next-hops *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

**Description** Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [prefix-limit-accepted](#)

**Tree** [prefix-limit-accepted](#)

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

**Description** Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [prefix-limit-accepted](#) [max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

**Description** Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-labeled-unicast](#) [prefix-limit-accepted](#) [prefix-limit-exceeded](#) *boolean*

**Tree** [prefix-limit-exceeded](#)

**Configurable** False

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms



**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**receive-ipv6-next-hops** *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-labeled-unicast</a> <a href="#">receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-unicast**

<b>Description</b>	Options related to the IPv4-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**link-bandwidth**

<b>Description</b>	Enter the link-bandwidth context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">link-bandwidth</a>
<b>Tree</b>	<a href="#">link-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**add-next-hop-count-to-received-bgp-routes** (*number* | *keyword*)

<b>Description</b>	Determines the weight that is internally added to the received PE-CE BGP routes  The configured weight is added to all received BGP PE-CE routes for the purpose of EVPN unequal ECMP. This weight is internal and not added into any link-bandwidth extended community when readvertising the received routes to other ipv4 or ipv6 neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">link-bandwidth</a> <a href="#">add-next-hop-count-to-received-bgp-routes</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">add-next-hop-count-to-received-bgp-routes</a>
<b>Range</b>	1 to 128
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>disable</code></li> </ul>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

**Description** Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [prefix-limit-accepted](#)

**Tree** [prefix-limit-accepted](#)

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

**Description** Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [prefix-limit-accepted](#) [max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

**Description** Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv4-unicast](#) [prefix-limit-accepted](#) [prefix-limit-exceeded](#) *boolean*

**Tree** [prefix-limit-exceeded](#)

**Configurable** False

**Platforms** Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### receive-ipv6-next-hops *boolean*

<b>Description</b>	Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops  When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv4-unicast</a> <a href="#">receive-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">receive-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ipv6-labeled-unicast

<b>Description</b>	Options related to the labeled-IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a>
<b>Tree</b>	<a href="#">ipv6-labeled-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>

<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-labeled-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-limit-exceeded** *boolean*

**Description** Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)

**Context** [network-instance name](#) [string](#) [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [prefix-limit-received](#) [prefix-limit-exceeded](#) *boolean*

**Tree** [prefix-limit-exceeded](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prevent-teardown** *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

**Context** [network-instance name](#) [string](#) [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [prefix-limit-received](#) [prevent-teardown](#) *boolean*

**Tree** [prevent-teardown](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **warning-threshold-pct** *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) [string](#) [protocols bgp neighbor peer-address](#) ([ipv4-address-with-zone](#) | [ipv6-address-with-zone](#)) [afi-safi](#) [afi-safi-name](#) [identityref](#) [ipv6-labeled-unicast](#) [prefix-limit-received](#) [warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-unicast

<b>Description</b>	Options related to the IPv6-unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## link-bandwidth

<b>Description</b>	Enter the link-bandwidth context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast link-bandwidth</a>
<b>Tree</b>	<a href="#">link-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## add-next-hop-count-to-received-bgp-routes (*number* | *keyword*)

<b>Description</b>	Determines the weight that is internally added to the received PE-CE BGP routes  The configured weight is added to all received BGP PE-CE routes for the purpose of EVPN unequal ECMP. This weight is internal and not added into any link-bandwidth extended community when readvertising the received routes to other ipv4 or ipv6 neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast link-bandwidth add-next-hop-count-to-received-bgp-routes</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">add-next-hop-count-to-received-bgp-routes</a>
<b>Range</b>	1 to 128

<b>Options</b>	• disable
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">max-received-routes</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">prefix-limit-exceeded</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prevent-teardown *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### warning-threshold-pct *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-received

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast prefix-limit-received</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast prefix-limit-received</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">ipv6-unicast prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**I3vpn-ipv4-unicast**

<b>Description</b>	Options related to the VPN-IPv4 unicast address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">I3vpn-ipv4-unicast</a>
<b>Tree</b>	<a href="#">I3vpn-ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-ipv6-next-hops** *boolean*

<b>Description</b>	Enables advertisement of IPv4 routes with IPv6 next-hops
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">I3vpn-ipv4-unicast</a> <a href="#">advertise-ipv6-next-hops</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-ipv6-next-hops</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**prefix-limit-accepted**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

**prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-received max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-received prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv4-unicast prefix-limit-received prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast prefix-limit-received warning-threshold-pct](#) *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### receive-ipv6-next-hops *boolean*

**Description** Enables the advertisement of the RFC 8950 capability to receive IPv4 routes with IPv6 next-hops

When set to true, BGP advertises an extended NH encoding (RFC 8950) capability to its peers. This capability indicates that local router is prepared to accept BGP routes for the AFI/SAFI with IPv6 next-hops from peers in the scope of the command. When set to false, BGP handles received AFI/SAFI routes with IPv6 next-hops as an error and applies treat-as-withdraw.

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi afi-safi-name](#) [identityref](#) [l3vpn-ipv4-unicast receive-ipv6-next-hops](#) *boolean*

**Tree** [receive-ipv6-next-hops](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### l3vpn-ipv6-unicast

**Description** Options related to the VPN-IPv6 unicast address family

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a>
<b>Tree</b>	<a href="#">l3vpn-ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">prefix-limit-accepted</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast prefix-limit-accepted</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### **prefix-limit-received**

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-received-routes *number*

**Description** Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast prefix-limit-received max-received-routes](#) *number*

**Tree** [max-received-routes](#)

**Range** 1 to 4294967295

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-exceeded *boolean*

**Description** Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref](#) [l3vpn-ipv6-unicast prefix-limit-received prefix-limit-exceeded](#) *boolean*

**Tree** [prefix-limit-exceeded](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prevent-teardown *boolean*

**Description** When false the session is immediately torn down when the max-received-routes limit is reached

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **warning-threshold-pct** *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">l3vpn-ipv6-unicast</a> <a href="#">prefix-limit-received</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Enter the oper-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Negotiated operational state of the address family is up</li> <li>• down Negotiated operational state of the address family is down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



### received-routes *number*

<b>Description</b>	The number of routes belonging to this AFI/SAFI received from the peer, including routes rejected by import policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">received-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### received-routes-withdrawn-due-to-error *number*

<b>Description</b>	The number of routes belonging to this AFI/SAFI received from the peer that were withdrawn due to an update packet error
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">received-routes-withdrawn-due-to-error</a> <i>number</i>
<b>Tree</b>	<a href="#">received-routes-withdrawn-due-to-error</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rejected-routes *number*

<b>Description</b>	The number of routes belonging to this AFI/SAFI received from the peer that were rejected by import policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">rejected-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">rejected-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### route-target

<b>Description</b>	Options related to the RT constraint address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a>

<b>Tree</b>	<a href="#">route-target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-limit-accepted

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be accepted from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-accepted</a>
<b>Tree</b>	<a href="#">prefix-limit-accepted</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### max-received-routes *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting ONLY routes accepted by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-accepted</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-exceeded *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-accepted</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prevent-teardown *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-accepted</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### warning-threshold-pct *number*

<b>Description</b>	A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-accepted</a> <a href="#">warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7215 IXS-A1 and all 7220/7250 IXR platforms

### prefix-limit-received

<b>Description</b>	Options for configuring the maximum number of routes, specific to this address family, allowed to be received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-received</a>
<b>Tree</b>	<a href="#">prefix-limit-received</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-received-routes** *number*

<b>Description</b>	Maximum number of routes allowed from the peer, counting routes accepted and rejected by import policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-received</a> <a href="#">max-received-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-received-routes</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-limit-exceeded** *boolean*

<b>Description</b>	Changes from false to true when the number of received routes increases to max-received-routes + 1 and remains true until the number of received routes decreases back to max-received-routes (applicable if prevent-teardown = true) or until the session is re-established (applicable if prevent-teardown = false)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-received</a> <a href="#">prefix-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-limit-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prevent-teardown** *boolean*

<b>Description</b>	When false the session is immediately torn down when the max-received-routes limit is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">afi-safi</a> <a href="#">afi-safi-name</a> <a href="#">identityref</a> <a href="#">route-target</a> <a href="#">prefix-limit-received</a> <a href="#">prevent-teardown</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prevent-teardown</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### warning-threshold-pct *number*

**Description** A percentage of the max-received-routes limit that sets the threshold when BGP raises a warning log event

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) [prefix-limit-received](#) **warning-threshold-pct** *number*

**Tree** [warning-threshold-pct](#)

**Range** 0 to 100

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-default-route *boolean*

**Description** When true the router advertises a synthetically generated default RTC route to the neighbor

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref](#) [route-target](#) **send-default-route** *boolean*

**Tree** [send-default-route](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sent-routes *number*

**Description** The number of routes belonging to this AFI/SAFI advertised as reachable to the peer

**Context** [network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [afi-safi](#) [afi-safi-name](#) [identityref](#) **sent-routes** *number*

**Tree** [sent-routes](#)

**Configurable** False

**Platforms** Supported on all platforms

## as-path-options

**Description** Options for handling the AS\_PATH in received BGP routes

**Context** [network-instance name string protocols bgp neighbor peer-address \(ipv4-address-with-zone | ipv6-address-with-zone\) as-path-options](#)

**Tree** [as-path-options](#)

**Configurable** True

**Platforms** Supported on all platforms

## allow-own-as *number*

**Description** The maximum number of times the global AS number or a local AS number of the BGP instance can appear in any received AS\_PATH before it is considered a loop and considered invalid

**Context** [network-instance name string protocols bgp neighbor peer-address \(ipv4-address-with-zone | ipv6-address-with-zone\) as-path-options allow-own-as number](#)

**Tree** [allow-own-as](#)

**Configurable** True

**Platforms** Supported on all platforms

## remove-private-as

**Description** Container with options for removing private AS numbers (2-byte and 4-byte) from the advertised AS path towards all peers

**Context** [network-instance name string protocols bgp neighbor peer-address \(ipv4-address-with-zone | ipv6-address-with-zone\) as-path-options remove-private-as](#)

**Tree** [remove-private-as](#)

**Configurable** True

**Platforms** Supported on all platforms

## ignore-peer-as *boolean*

**Description** If set to true then do not delete or replace a private AS number that is the same as the peer AS number

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">as-path-options remove-private-as ignore-peer-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore-peer-as</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **leading-only** *boolean*

<b>Description</b>	If set to true then only delete or replace private AS numbers that appear before the first occurrence of a non-private ASN in the sequence of most recent ASNs in the AS path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">as-path-options remove-private-as leading-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leading-only</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **mode** *keyword*

<b>Description</b>	The method by which private AS numbers are removed from the advertised AS_PATH attribute
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">as-path-options remove-private-as mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• disabled Do not strip or replace any private AS numbers</li> <li>• delete Delete private AS numbers, shortening the AS path</li> <li>• replace Replace private AS numbers with the local AS number used towards the peer, maintaining the AS path length</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**replace-peer-as** *boolean*

<b>Description</b>	If set to true then replace every occurrence of the peer AS number that is present in the advertised AS path with the local AS number used towards the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">as-path-options replace-peer-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">replace-peer-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container with authentication options that apply to this specific peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**keychain** *reference*

<b>Description</b>	Reference to a keychain. The keychain type must be tcp-md5.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">authentication keychain reference</a>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**password** *string*

<b>Description</b>	Configures an MD5 authentication password for use with neighboring devices.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">authentication password</a> <i>string</i>



<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmit-active** *boolean*

<b>Description</b>	Reads true when the TCP segments being sent to the peer have authentication data.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">authentication transmit-active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">transmit-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**description** *string*

<b>Description</b>	A user provided description string for the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**discovered-by-lldp** *boolean*

<b>Description</b>	Set to true if the peer IP address is known through LLDP (irrespective of whether the final TCP connection was originated by this router or not)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">discovered-by-lldp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">discovered-by-lldp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**dynamic-neighbor** *boolean*

<b>Description</b>	Indicates true if the neighbor is a dynamic peer that resulted from an accepted incoming TCP connection or an outgoing TCP connection triggered by LLDP auto-discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">dynamic-neighbor</a> <i>boolean</i>
<b>Tree</b>	<a href="#">dynamic-neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**established-transitions** *number*

<b>Description</b>	The total number of times the BGP FSM transitioned into the established state for this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">established-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">established-transitions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**export-policy** *reference*

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

**failure-detection**

<b>Description</b>	Options related to methods of detecting BGP session failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">failure-detection</a>

<b>Tree</b>	<a href="#">failure-detection</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**enable-bfd** *boolean*

<b>Description</b>	The true setting enables Bi-directional Forwarding Detection on BGP sessions belonging to the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">failure-detection enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fast-failover** *boolean*

<b>Description</b>	The true setting the EBGP or IBGP session to drop immediately (and not wait for hold timer expiry) when the local interface that it depends upon for neighbor reachability goes down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">failure-detection fast-failover</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fast-failover</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**graceful-restart**

<b>Description</b>	Options related to router behavior as a graceful restart helper
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable graceful restart helper for all address families
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• enable</li><li>• disable</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**helper-active** *boolean*

<b>Description</b>	Set to true when the router is actively helping the neighbor for at least one address family - i.e. for that address family the peer restarted with F=1 in its capability and the stale-routes-time has not expired yet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart helper-active boolean</a>
<b>Tree</b>	<a href="#">helper-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-restart-time** *string*

<b>Description</b>	The last time the peer restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart last-restart-time string</a>
<b>Tree</b>	<a href="#">last-restart-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## neighbor-capability

<b>Description</b>	Container for information about the last GR capability received from the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart neighbor-capability</a>
<b>Tree</b>	<a href="#">neighbor-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## afi-safi [name](#) *identityref*

<b>Description</b>	List of AFI/SAFI TLVs that were contained in the neighbor's last GR capability
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart neighbor-capability</a> <a href="#">afi-safi name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">afi-safi</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## name *identityref*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart neighbor-capability</a> <a href="#">afi-safi name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> </ul>

- `ipv6-labeled-unicast`  
Labeled IPv6 unicast routes (AFI 2, SAFI 4)
- `evpn`  
EVPN routes (AFI = 25, SAFI = 70)
- `route-target`  
Route target constraint routes (AFI 1, SAFI 132)
- `sr-policy-ipv4`  
SR-TE Policy (AFI 1, SAFI 73)
- `sr-policy-ipv6`  
SR-TE Policy (AFI 2, SAFI 73)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **forwarding-preserved** *boolean*

<b>Description</b>	The F-bit setting in the AFI/SAFI TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart neighbor-capability</a> <a href="#">afi-safi name</a> <i>identityref</i> <code>forwarding-preserved</code> <i>boolean</i>
<b>Tree</b>	<a href="#">forwarding-preserved</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **restart-time** *number*

<b>Description</b>	The value of the Restart Time in the neighbor's last GR capability
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart neighbor-capability</a> <code>restart-time</code> <i>number</i>
<b>Tree</b>	<a href="#">restart-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **number-of-restarts** *number*

<b>Description</b>	The number of times the peer has restarted
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart number-of-restarts</a> <i>number</i>
<b>Tree</b>	<a href="#">number-of-restarts</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **requested-restart-time** *number*

<b>Description</b>	The restart time encoded in this router's GR capability.  If the neighbor honors this request then this is the maximum time allowed for this router to re-establish its TCP connection after a restart. If this time is exceeded, the neighbor is expected to flush stale routes that it was maintaining on behalf of this router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart requested-restart-time</a> <i>number</i>
<b>Tree</b>	<a href="#">requested-restart-time</a>
<b>Range</b>	1 to 3600
<b>Default</b>	300
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stale-routes-time** *number*

<b>Description</b>	The maximum number of seconds that routes received from a helped peer remain stale until they are deleted  Routes of AFI/SAFI X received from peer Y are marked stale when peer Y goes down and its previous GR capability included AFI/SAFI X.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart stale-routes-time</a> <i>number</i>
<b>Tree</b>	<a href="#">stale-routes-time</a>
<b>Range</b>	1 to 3600
<b>Units</b>	seconds

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **import-policy** *reference*

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">import-policy reference</a>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

### **last-established** *string*

<b>Description</b>	The time when the session last transitioned into or out of the established state  Uptime or downtime of the session can be calculated from this state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">last-established</a> <i>string</i>
<b>Tree</b>	<a href="#">last-established</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-event** *keyword*

<b>Description</b>	Enter the last-event context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">last-event</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-event</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• start</li> <li>• stop</li> <li>• open</li> <li>• close</li> </ul>



- openFail
- error
- connectRetry
- holdTime
- keepAlive
- recvOpen
- recvKeepAlive
- recvUpdate
- recvNotify
- startPassive
- parseError
- outOfMemory
- rtmLimitExceed
- outOfProtNHIndex
- outOfNHIndex
- labelAllocFailed
- lspIdAllocFailed
- collisionResolution
- adminShutdown
- adminReset
- configChange
- maxPrefixExceed
- maxPfxExcdLog
- trackingPolMismatch
- receivedMalformedAttr
- adminResetHard
- peerDamping

**Configurable**

False

**Platforms**

Supported on all platforms

**last-prefix-limit-exceeded** *string***Description**

Time when the neighbor last violated a configured prefix-limit for any AFI/SAFI

This value is set/updated when any AFI/SAFI prefix-limit-exceeded leaf transitions from false/unset to true.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">last-prefix-limit-exceeded</a> <i>string</i>
<b>Tree</b>	<a href="#">last-prefix-limit-exceeded</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-state** *keyword*

<b>Description</b>	Previous state of the session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">last-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• idle</li> <li>• connect</li> <li>• active</li> <li>• opensent</li> <li>• openconfirm</li> <li>• established</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **local-as**

<b>Description</b>	Options related to the local autonomous-system number advertised by this router to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a>
<b>Tree</b>	<a href="#">local-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**as-number** *number*

<b>Description</b>	The local autonomous system number used to override the global ASN on this session  Sets the ASN value that this router sends in its OPEN message towards its peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as as-number</a> <i>number</i>
<b>Tree</b>	<a href="#">as-number</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prepend-global-as** *boolean*

<b>Description</b>	When set to true, the global ASN value is prepended to the AS path in outbound routes towards the peer  If a session is EBGp (peer-as is not equal to the local-as) then the local-as is prepended as the final step, so that the local-as is the first element in the AS_PATH received by the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as prepend-global-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prepend-global-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prepend-local-as** *boolean*

<b>Description</b>	When set to true, the local AS value is prepended to the AS path of inbound routes from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as prepend-local-as</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prepend-local-as</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**local-preference** *number*

<b>Description</b>	The value of the local-preference attribute that is added to received routes from the peer, if it is EBGP  It is also used to encode the local preference attribute for locally generated BGP routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">local-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance-group** *string*

<b>Description</b>	State field to display the maintenance group to which this neighbor belongs to.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">maintenance-group</a> <i>string</i>
<b>Tree</b>	<a href="#">maintenance-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**multihop**

<b>Description</b>	Configuration parameters specifying the multihop behaviour for an EBGP peer. This is not applicable to an IBGP peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">multihop</a>
<b>Tree</b>	<a href="#">multihop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	When enabled, the peer is allowed to be indirectly connected by up to N hops, where N is controlled by the maximum-hops parameter. When disabled, multihop is allowed only if the peer type is IBGP.  This overrides the group setting for admin-state.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">multihop admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### maximum-hops *number*

<b>Description</b>	<p>This sets the maximum number of routing hops towards the peer. It determines the IP TTL value in originated BGP TCP/IP packets. By default the TTL is set to 1 towards an EBGP peer and 64 towards an IBGP peer.</p> <p>This overrides the group setting for maximum-hops.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">multihop maximum-hops</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-hops</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### next-hop-self *boolean*

<b>Description</b>	<p>When set to true, the next-hop in all IPv4-unicast, IPv6-unicast and EVPN BGP routes advertised to the peer, if IBGP, is set equal to the local-address used on this session (or to the router ID if the NLRI is IPv6 and there is no IPv6 local address to use). This is independent of the route origin (EBGP, IBGP-client, IBGP-non-client or redistributed direct/static/aggregate route).</p> <p>When set to false, normal BGP rules from RFC 4271 apply.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">next-hop-self</a> <i>boolean</i>
<b>Tree</b>	<a href="#">next-hop-self</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**optional-attributes**

<b>Description</b>	Enter the optional-attributes context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">optional-attributes</a>
<b>Tree</b>	<a href="#">optional-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**block-prefix-sid** *boolean*

<b>Description</b>	Remove the prefix SID optional transitive attribute in all received and sent routes to this peer, or group of peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">optional-attributes</a> <a href="#">block-prefix-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">block-prefix-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-as** *number*

<b>Description</b>	The autonomous system number expected from the peer A configured session with a peer does not come up if this value does not match the AS value reported by the peer in its OPEN message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-group** *reference*

<b>Description</b>	A reference to the peer-group template to use for this BGP session This is not immutable.
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<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) peer-group reference</a>
<b>Tree</b>	<a href="#">peer-group</a>
<b>Reference</b>	<a href="#">network-instance name string protocols bgp group group-name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **peer-router-id** *string*

<b>Description</b>	The BGP identifier advertised by the peer in its OPEN message
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) peer-router-id string</a>
<b>Tree</b>	<a href="#">peer-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **peer-type** *keyword*

<b>Description</b>	The session type. The type is EBGP when the local AS and peer AS are different, and the type is IBGP when the local AS and peer AS have the same value.
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) peer-type keyword</a>
<b>Tree</b>	<a href="#">peer-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>ibgp</code> Indicates that the peer is IBGP (<code>local-as == peer-as</code>).</li> <li>• <code>ebgp</code> Indicates that the peer is EBGP (<code>local-as != peer-as</code>).</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **received-afi-safi** *identityref*

<b>Description</b>	List of multiprotocol BGP address families supported by the peer, derived from the AFI/SAFI list in the MP-BGP capability received by the local routing device from the peer
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) received-afi-safi identityref</a>

<b>Tree</b>	<a href="#">received-afi-safi</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <a href="#">ipv6-labeled-unicast</a> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <a href="#">evpn</a> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <a href="#">route-target</a> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <a href="#">sr-policy-ipv4</a> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <a href="#">sr-policy-ipv6</a> SR-TE Policy (AFI 2, SAFI 73)</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **received-capabilities** *keyword*

<b>Description</b>	List of BGP capabilities received by the local routing device from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">received-capabilities</a> <i>keyword</i>
<b>Tree</b>	<a href="#">received-capabilities</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">MP_BGP</a></li> <li>• <a href="#">ROUTE_REFRESH</a></li> <li>• <a href="#">EXT_NH_ENCODING</a></li> <li>• <a href="#">GRACEFUL_RESTART</a></li> <li>• <a href="#">4-OCTET_ASN</a></li> <li>• <a href="#">ORF_SEND_EXCOMM</a></li> </ul>



	<ul style="list-style-type: none"> <li>• ORF_RECEIVE_EXCOMM</li> <li>• ADD_PATH</li> <li>• LONG_LIVED_GR</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### received-end-of-rib *identityref*

<b>Description</b>	List of address families for which the peer has signaled the End of RIB marker
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-end-of-rib</a> <i>identityref</i>
<b>Tree</b>	<a href="#">received-end-of-rib</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>ipv4-unicast</code> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <code>ipv6-unicast</code> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <code>l3vpn-ipv4-unicast</code> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <code>l3vpn-ipv6-unicast</code> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <code>ipv4-labeled-unicast</code> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <code>ipv6-labeled-unicast</code> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <code>evpn</code> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <code>route-target</code> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <code>sr-policy-ipv4</code> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <code>sr-policy-ipv6</code> SR-TE Policy (AFI 2, SAFI 73)</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## received-messages

<b>Description</b>	Container for state information about BGP messages received from the peer.
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) received-messages</a>
<b>Tree</b>	<a href="#">received-messages</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-notification-error-code *keyword*

<b>Description</b>	The error code in the last NOTIFICATION received from this peer.
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) received-messages last-notification-error-code keyword</a>
<b>Tree</b>	<a href="#">last-notification-error-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Message Header Error</li> <li>• Open Message Error</li> <li>• Update Message Error</li> <li>• Hold Timer Error</li> <li>• Finite State Machine Error</li> <li>• Cease</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-notification-error-subcode *keyword*

<b>Description</b>	The error subcode in the last NOTIFICATION received from the peer.
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) received-messages last-notification-error-subcode keyword</a>
<b>Tree</b>	<a href="#">last-notification-error-subcode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Connection Not Synchronized</li> <li>• Bad Message Length</li> <li>• Bad Message Type</li> <li>• Unsupported Version Number</li> <li>• Bad Peer As</li> </ul>

- Bad BGP Identifier
- Unsupported Optional Parameter
- Unacceptable Hold Time
- UPDATE Message Error subcodes
- Malformed Attribute List
- Unrecognized Well-known Attribute
- Missing Well-known Attribute
- Attribute Flags Error
- Attribute Length Error
- Invalid ORIGIN Attribute
- Invalid NEXT\_HOP Attribute
- Optional Attribute Error
- Invalid Network Field
- Malformed AS\_PATH
- Maximum Number of Prefixes Reached
- Administrative Shutdown
- Peer De-configured
- Administrative Reset
- Connection Rejected
- Other Configuration Change
- Connection Collision Resolution
- Out of Resources
- Unspecific
- Hard Reset
- Unsupported Capability

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-notification-time** *string*

<b>Description</b>	Timestamp representing the time of the last Notification message received from the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">received-messages last-notification-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-notification-time</a>
<b>String Length</b>	20 to 32

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-update-time** *string*

<b>Description</b>	The timestamp when the last UPDATE was received from this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-messages last-update-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **malformed-updates** *number*

<b>Description</b>	Number of BGP UPDATE messages received from the peer that were malformed but recoverable through treat-as-withdraw or attribute-discard (i.e. without session reset)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-messages malformed-updates</a> <i>number</i>
<b>Tree</b>	<a href="#">malformed-updates</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **queue-depth** *number*

<b>Description</b>	The number of messages received from the peer currently queued.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-messages queue-depth</a> <i>number</i>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-refresh** *number*

<b>Description</b>	Number of BGP ROUTE_REFRESH messages received from the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">received-messages route-refresh</a> <i>number</i>
<b>Tree</b>	<a href="#">route-refresh</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-messages** *number*

<b>Description</b>	Total number of BGP messages received from the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">received-messages total-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">total-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-non-updates** *number*

<b>Description</b>	Number of BGP NON UPDATE messages received from the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">received-messages total-non-updates</a> <i>number</i>
<b>Tree</b>	<a href="#">total-non-updates</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-notifications** *number*

<b>Description</b>	Number of BGP Notification messages received from the peer over the lifetime of its configuration or since the last clear.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-messages total-notifications</a> <i>number</i>
<b>Tree</b>	<a href="#">total-notifications</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-updates** *number*

<b>Description</b>	Number of BGP UPDATE messages received from the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">received-messages total-updates</a> <i>number</i>
<b>Tree</b>	<a href="#">total-updates</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-reflector**

<b>Description</b>	Container with route reflection configuration options.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">route-reflector</a>
<b>Tree</b>	<a href="#">route-reflector</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**client** *boolean*

<b>Description</b>	When this is set to true this BGP session is considered an RR client.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">route-reflector client</a> <i>boolean</i>
<b>Tree</b>	<a href="#">client</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**cluster-id** (*number* | *dotted-quad*)

<b>Description</b>	The cluster-id to insert into the CLUSTER_LIST attribute when reflecting routes received by or sent to this client. The default is inherited from group or instance level configuration.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">route-reflector cluster-id</a> ( <i>number</i>   <i>dotted-quad</i> )
<b>Tree</b>	<a href="#">cluster-id</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**send-default-route**

<b>Description</b>	Options for controlling the generation of default routes towards the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">send-default-route</a>
<b>Tree</b>	<a href="#">send-default-route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-policy** *reference*

<b>Description</b>	The name of a policy that should be applied to the advertised default routes, in order to set their attributes to non-default values Only the default-action of this policy is parsed and applied.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">send-default-route export-policy reference</a>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv4-unicast** *boolean*

<b>Description</b>	Enables the sending of a synthetically generated default IPv4 route [0/0] to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">send-default-route ipv4-unicast boolean</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-unicast** *boolean*

<b>Description</b>	Enables the sending of a synthetically generated default IPv6 route [::/0] to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">send-default-route ipv6-unicast boolean</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**sent-end-of-rib** *identityref*

<b>Description</b>	List of address families for which this router sent the peer an End of RIB marker
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-end-of-rib identityref</a>
<b>Tree</b>	<a href="#">sent-end-of-rib</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a></li> </ul>



- Labeled IPv4 unicast routes (AFI 1, SAFI 4)
- ipv6-labeled-unicast
- Labeled IPv6 unicast routes (AFI 2, SAFI 4)
- evpn
- EVPN routes (AFI = 25, SAFI = 70)
- route-target
- Route target constraint routes (AFI 1, SAFI 132)
- sr-policy-ipv4
- SR-TE Policy (AFI 1, SAFI 73)
- sr-policy-ipv6
- SR-TE Policy (AFI 2, SAFI 73)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## sent-messages

<b>Description</b>	Container for state information about BGP messages sent to the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-messages</a>
<b>Tree</b>	<a href="#">sent-messages</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-notification-error-code *keyword*

<b>Description</b>	The error code in the last NOTIFICATION sent to this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-messages last-notification-error-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-notification-error-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Message Header Error</li> <li>• Open Message Error</li> <li>• Update Message Error</li> <li>• Hold Timer Error</li> <li>• Finite State Machine Error</li> <li>• Cease</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-notification-error-subcode** *keyword*

<b>Description</b>	The error subcode in the last NOTIFICATION sent to this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">sent-messages last-notification-error-subcode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-notification-error-subcode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Connection Not Synchronized</li> <li>• Bad Message Length</li> <li>• Bad Message Type</li> <li>• Unsupported Version Number</li> <li>• Bad Peer As</li> <li>• Bad BGP Identifier</li> <li>• Unsupported Optional Parameter</li> <li>• Unacceptable Hold Time</li> <li>• UPDATE Message Error subcodes</li> <li>• Malformed Attribute List</li> <li>• Unrecognized Well-known Attribute</li> <li>• Missing Well-known Attribute</li> <li>• Attribute Flags Error</li> <li>• Attribute Length Error</li> <li>• Invalid ORIGIN Attribute</li> <li>• Invalid NEXT_HOP Attribute</li> <li>• Optional Attribute Error</li> <li>• Invalid Network Field</li> <li>• Malformed AS_PATH</li> <li>• Maximum Number of Prefixes Reached</li> <li>• Administrative Shutdown</li> <li>• Peer De-configured</li> <li>• Administrative Reset</li> <li>• Connection Rejected</li> <li>• Other Configuration Change</li> <li>• Connection Collision Resolution</li> <li>• Out of Resources</li> </ul>

- Unspecific
- Hard Reset
- Unsupported Capability

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-notification-time** *string*

<b>Description</b>	Timestamp representing the time of the last Notification message sent to the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-messages last-notification-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-notification-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **queue-depth** *number*

<b>Description</b>	The number of messages queued to be sent to the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-messages queue-depth</a> <i>number</i>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **route-refresh** *number*

<b>Description</b>	Number of BGP ROUTE_REFRESH messages sent to the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">sent-messages route-refresh</a> <i>number</i>
<b>Tree</b>	<a href="#">route-refresh</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **total-messages** *number*

**Description** Total number of BGP messages sent to the peer over the lifetime of its configuration or since the last clear.

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [sent-messages](#) [total-messages](#) *number*

**Tree** [total-messages](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **total-non-updates** *number*

**Description** Number of BGP NON UPDATE messages sent to the peer over the lifetime of its configuration or since the last clear.

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [sent-messages](#) [total-non-updates](#) *number*

**Tree** [total-non-updates](#)

**Configurable** False

**Platforms** Supported on all platforms

### **total-notifications** *number*

**Description** Number of BGP Notification messages sent to the peer over the lifetime of its configuration or since the last clear.

**Context** [network-instance name](#) *string* [protocols](#) [bgp](#) [neighbor](#) [peer-address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [sent-messages](#) [total-notifications](#) *number*

**Tree** [total-notifications](#)

**Configurable** False

**Platforms** Supported on all platforms

**total-updates** *number*

<b>Description</b>	Number of BGP UPDATE messages sent to the peer over the lifetime of its configuration or since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">sent-messages</a> <a href="#">total-updates</a> <i>number</i>
<b>Tree</b>	<a href="#">total-updates</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**session-state** *keyword*

<b>Description</b>	Current state of the session
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">session-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">session-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• idle</li> <li>• connect</li> <li>• active</li> <li>• opensent</li> <li>• openconfirm</li> <li>• established</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**slow-peer** *keyword*

<b>Description</b>	Set to 'yes' if, after the last BGP restart, the session was in a lesser state than established when the min-wait-to-advertise timer expired  Set to unknown if the min-wait-to-advertise time has not yet elapsed.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">neighbor</a> <a href="#">peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">slow-peer</a> <i>keyword</i>
<b>Tree</b>	<a href="#">slow-peer</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>

- unknown

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## timers

<b>Description</b>	Enter the timers context
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) timers</a>
<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## connect-retry number

<b>Description</b>	The time interval in seconds between successive attempts to establish a session with a peer
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) timers connect-retry number</a>
<b>Tree</b>	<a href="#">connect-retry</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## hold-time number

<b>Description</b>	The hold-time interval in seconds that the router proposes to the peer in its OPEN message  The actual in-use hold-time is negotiated to the lowest value proposed by the two peers. A negotiated value of 0 suppresses the sending of keepalives by both peers.
<b>Context</b>	<a href="#">network-instance name string protocols bgp neighbor peer-address (ipv4-address-with-zone   ipv6-address-with-zone) timers hold-time number</a>
<b>Tree</b>	<a href="#">hold-time</a>
<b>Range</b>	0   3 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### keepalive-interval *number*

**Description** The interval in seconds between successive keepalive messages sent to the peer

The period between one keepalive message and the next is the minimum of this configured (or inherited) value and 1/3 of the negotiated hold-time duration. A value of 0 suppresses the sending of keepalives to the peer.

**Context** [network-instance name string protocols bgp neighbor peer-address \(ipv4-address-with-zone | ipv6-address-with-zone\) timers keepalive-interval number](#)

**Tree** [keepalive-interval](#)

**Range** 0 to 21845

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

### minimum-advertisement-interval *number*

**Description** The value assigned to the MinRouteAdvertisementIntervalTimer of RFC 4271, for both EBGp and IBGP sessions

Each session runs its own independent timer and the timer affects both route advertisements and route withdrawals, regardless of address family. For route withdrawals only, this timer is bypassed if rapid-withdrawal is set to true.

**Context** [network-instance name string protocols bgp neighbor peer-address \(ipv4-address-with-zone | ipv6-address-with-zone\) timers minimum-advertisement-interval number](#)

**Tree** [minimum-advertisement-interval](#)

**Range** 1 to 255

**Units** seconds

**Configurable** True

**Platforms** Supported on all platforms

### negotiated-hold-time *number*

**Description** The operational hold-time

It is negotiated to the lowest value proposed by the two peers. A negotiated value of 0 suppresses the sending of keepalives by both peers.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">timers negotiated-hold-time number</a>
<b>Tree</b>	<a href="#">negotiated-hold-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **negotiated-keepalive-interval** *number*

<b>Description</b>	The operational keepalive interval It is the minimum of the configured value and 1/3 of the negotiated-hold-time. A value of 0 suppresses the sending of keepalives to the peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">timers negotiated-keepalive-interval number</a>
<b>Tree</b>	<a href="#">negotiated-keepalive-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **next-connect-retry-time** *string*

<b>Description</b>	The time when the next connect retry attempt will occur
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">timers next-connect-retry-time string</a>
<b>Tree</b>	<a href="#">next-connect-retry-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **prefix-limit-restart-timer** *number*

<b>Description</b>	Time interval in seconds after which the BGP session is re-established after being torn down due to exceeding any prefix limit (of any address family) This only applies if prevent-teardown is false.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">timers prefix-limit-restart-timer number</a>
<b>Tree</b>	<a href="#">prefix-limit-restart-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace-options

<b>Description</b>	Debug traceoptions for BGP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## flag *name keyword*

<b>Description</b>	Tracing parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">trace-options flag name keyword</a>
<b>Tree</b>	<a href="#">flag</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## name *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">trace-options flag name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>events Trace all BGP events.</li> <li>packets</li> </ul>

- Trace all BGP protocol packets.
- open  
Trace BGP open packets.
- keepalive  
Trace BGP keepalive packets.
- graceful-restart  
Trace Graceful Restart events.
- timers  
Trace routing protocol timer processing.
- route  
Trace BGP route table manager.
- notification  
Trace Bgp notification.
- socket  
Trace socket info.
- update  
Trace update info.

**Configurable**

True

**Platforms**

Supported on all platforms

**modifier** *keyword***Description**

Enter the modifier context

**Context**

[network-instance name](#) *string* [protocols bgp neighbor peer-address](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) [trace-options flag name](#) *keyword* [modifier](#) *keyword*

**Tree**[modifier](#)**Options**

- detail  
To enable detailed tracing. Includes both received and sent packets.
- receive  
To enable tracing for the packets which are received.
- send  
To enable tracing for the sent packets.

**Configurable**

True

**Platforms**

Supported on all platforms

**transport**

<b>Description</b>	Enter the transport context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**local-address** (*ipv4-address* | *ipv6-address* | *subinterface-all*)

<b>Description</b>	<p>The local TCP endpoint of used for the BGP session</p> <p>This also the source address for next-hop-self, if it applies. The local-address can be specified as an IP address that is resolvable to a local interface.</p> <p>This address must be the primary address of an interface, otherwise the session will not come up.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">transport local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>subinterface-all</i> )
<b>Tree</b>	<a href="#">local-address</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**local-port** *number*

<b>Description</b>	Local TCP port used for the TCP connection to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">transport local-port</a> <i>number</i>
<b>Tree</b>	<a href="#">local-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**mtu-discovery** *boolean*

<b>Description</b>	Turns path mtu discovery on (true) or off (false)
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">transport mtu-discovery</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mtu-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**passive-mode** *boolean*

<b>Description</b>	The true setting causes BGP to wait for the peer to initiate the TCP connection  The false setting causes BGP to initiate a TCP connection whenever the BGP session is started or restarted.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">transport passive-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">passive-mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**remote-port** *number*

<b>Description</b>	Remote TCP port used by the peer for its TCP connection to the local router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">transport remote-port</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tcp-mss** *number*

<b>Description</b>	The maximum segment size of BGP TCP packets  The configured value of this leaf is the TCP MSS value advertised to the peer during TCP connection setup (in the TCP MSS option), reduced if necessary to accommodate the outgoing interface IP MTU. The state value of this leaf is the operational TCP MSS used in the data transmit direction towards the peer. It may be less than the received TCP MSS option value
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due to adjustment for TCP options used in the transit direction and/or the path MTU discovery process (if enabled).

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">transport tcp-mss</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-mss</a>
<b>Range</b>	536 to 9446
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **under-maintenance** *boolean*

<b>Description</b>	State field to determine if this bgp neighbor is in maintenance mode.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">under-maintenance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">under-maintenance</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	Enter the oper-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Operational state of BGP is up.</li> <li>• down Operational state of BGP is down.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **preference**

<b>Description</b>	Options for controlling the route table preference of BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp preference</a>
<b>Tree</b>	<a href="#">preference</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ebgp number**

<b>Description</b>	The default route table preference for all EBGp learned routes BGP import policies can override this preference value on a route by route basis.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp preference ebgp number</a>
<b>Tree</b>	<a href="#">ebgp</a>
<b>Range</b>	1 to 255
<b>Default</b>	170
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ibgp number**

<b>Description</b>	The default route table preference for all IBGP learned routes BGP import policies can override this preference value on a route by route basis.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp preference ibgp number</a>
<b>Tree</b>	<a href="#">ibgp</a>
<b>Range</b>	1 to 255
<b>Default</b>	170
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rib-management**

<b>Description</b>	Enter the rib-management context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp rib-management</a>
<b>Tree</b>	<a href="#">rib-management</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**table** *address-family identityref*

<b>Description</b>	List of RIB tables maintained by BGP running in this network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp rib-management table address-family identityref</a>
<b>Tree</b>	<a href="#">table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address-family** *identityref*

<b>Description</b>	BGP address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp rib-management table address-family identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <a href="#">ipv6-labeled-unicast</a> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <a href="#">evpn</a> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <a href="#">route-target</a> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <a href="#">sr-policy-ipv4</a> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <a href="#">sr-policy-ipv6</a> SR-TE Policy (AFI 2, SAFI 73)</li> </ul>
<b>Configurable</b>	True

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### route-table-import *reference*

<b>Description</b>	Apply a route policy to accept routes that should be installed in the BGP RIB table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp rib-management table address-family</a> <i>identityref</i> <a href="#">route-table-import</a> <i>reference</i>
<b>Tree</b>	<a href="#">route-table-import</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### route-advertisement

<b>Description</b>	Options for controlling route advertisement behavior
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-advertisement</a>
<b>Tree</b>	<a href="#">route-advertisement</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### rapid-withdrawal *boolean*

<b>Description</b>	The true setting enables rapid-withdraw towards BGP peers If there is only one BGP route for an NLRI in BGP RIB, and this route is withdrawn or becomes invalid, rapid-withdraw causes BGP to immediately send a withdrawal of the BGP route even if the min-route-advertisement timer has not expired.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-advertisement rapid-withdrawal</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rapid-withdrawal</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**wait-for-fib-install** *boolean*

<b>Description</b>	The true setting causes BGP to NOT advertise initial reachability to a prefix, or a change of reachability to a prefix, until it receives acknowledgment from FIB manager that the route change has been applied  Does not apply to route withdrawals.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-advertisement wait-for-fib-install</a> <i>boolean</i>
<b>Tree</b>	<a href="#">wait-for-fib-install</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-reflector**

<b>Description</b>	Container with route reflection configuration options.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-reflector</a>
<b>Tree</b>	<a href="#">route-reflector</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**client** *boolean*

<b>Description</b>	When this is set to true all configured and dynamic sessions of the BGP instance are considered RR clients, subject to overrides at more specific levels of configuration.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-reflector client</a> <i>boolean</i>
<b>Tree</b>	<a href="#">client</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**cluster-id** (*number | dotted-quad*)

<b>Description</b>	The cluster-id to insert into the CLUSTER_LIST attribute when reflecting routes received by or sent to clients in this scope of this container. The default is the router-id.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp route-reflector cluster-id</a> ( <i>number</i>   <i>dotted-quad</i> )
<b>Tree</b>	<a href="#">cluster-id</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **router-id** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The BGP identifier used by this BGP instance in all of its OPEN messages. Any non-zero value is supported.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp router-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **segment-routing-mpls**

<b>Description</b>	BGP support for segment routing using MPLS dataplane
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp segment-routing-mpls</a>
<b>Tree</b>	<a href="#">segment-routing-mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Enable SR-MPLS support within BGP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp segment-routing-mpls admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Container for BGP statistics.

**Context** [network-instance name](#) *string* [protocols bgp statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** Supported on all platforms

## disabled-peers *number*

**Description** The number of configured BGP peers that are administratively disabled

**Context** [network-instance name](#) *string* [protocols bgp statistics disabled-peers](#) *number*

**Tree** [disabled-peers](#)

**Configurable** False

**Platforms** Supported on all platforms

## dynamic-peers *number*

**Description** The number of dynamic BGP peers that are currently in the established state, counting sessions resulting from accepted incoming TCP connections and outgoing TCP connections triggered by LLDP auto-discovery

**Context** [network-instance name](#) *string* [protocols bgp statistics dynamic-peers](#) *number*

**Tree** [dynamic-peers](#)

**Configurable** False

**Platforms** Supported on all platforms

## path-memory *number*

**Description** The total number of bytes required to store the path attribute objects used by all received BGP routes

**Context** [network-instance name](#) *string* [protocols bgp statistics path-memory](#) *number*

**Tree** [path-memory](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **total-active-routes** *number*

**Description** The total number of received BGP routes that are active (installed for forwarding), summed across all address families

**Context** [network-instance name](#) *string* [protocols bgp statistics total-active-routes](#) *number*

**Tree** [total-active-routes](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **total-paths** *number*

**Description** The total number of path attribute objects used by all received BGP routes

**Context** [network-instance name](#) *string* [protocols bgp statistics total-paths](#) *number*

**Tree** [total-paths](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **total-peers** *number*

**Description** The total number of configured BGP peers

**Context** [network-instance name](#) *string* [protocols bgp statistics total-peers](#) *number*

**Tree** [total-peers](#)

**Configurable** False

**Platforms** Supported on all platforms

### **total-prefixes** *number*

**Description** The total number of unique NLRI contained in all received BGP routes associated with the BGP instance or the peer-group.

**Context** [network-instance name](#) *string* [protocols bgp statistics total-prefixes](#) *number*

**Tree** [total-prefixes](#)

**Configurable** False

**Platforms** Supported on all platforms

### **total-received-routes** *number*

**Description** The total number of received BGP routes, summed across all address families

**Context** [network-instance name](#) *string* [protocols bgp statistics total-received-routes](#) *number*

**Tree** [total-received-routes](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **up-peers** *number*

**Description** The number of configured BGP peers that are currently in the established state

**Context** [network-instance name](#) *string* [protocols bgp statistics up-peers](#) *number*

**Tree** [up-peers](#)

**Configurable** False

**Platforms** Supported on all platforms

### **trace-options**

**Description** Debug traceoptions for BGP

**Context** [network-instance name](#) *string* [protocols bgp trace-options](#)

**Tree** [trace-options](#)

**Configurable** True

**Platforms** Supported on all platforms

### **flag** *name* *keyword*

**Description** Tracing parameters

**Context** [network-instance name](#) *string* [protocols bgp trace-options flag](#) *name* *keyword*

**Tree** [flag](#)

**Configurable** True

**Platforms** Supported on all platforms

**name** *keyword*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp trace-options flag name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• events Trace all BGP events.</li> <li>• packets Trace all BGP protocol packets.</li> <li>• open Trace BGP open packets.</li> <li>• keepalive Trace BGP keepalive packets.</li> <li>• graceful-restart Trace Graceful Restart events.</li> <li>• timers Trace routing protocol timer processing.</li> <li>• route Trace BGP route table manager.</li> <li>• notification Trace Bgp notification.</li> <li>• socket Trace socket info.</li> <li>• update Trace update info.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**modifier** *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp trace-options flag name</a> <i>keyword</i> <a href="#">modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• detail To enable detailed tracing. Includes both received and sent packets.</li> <li>• receive</li> </ul>

To enable tracing for the packets which are received.

- send

To enable tracing for the sent packets.

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## transport

<b>Description</b>	Options related to the TCP transport of BGP sessions
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## mtu-discovery *boolean*

<b>Description</b>	Turns path mtu discovery for BGP TCP sessions on (true) or off (false) If this is unconfigured then the setting comes from <a href="#">network-instance/mtu/path-mtu-discovery</a> . Changing the value of <a href="#">network-instance/mtu/path-mtu-discovery</a> takes effect only for new connections established after the change
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp transport mtu-discovery</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mtu-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## single-hop-connected-check *boolean*

<b>Description</b>	Control whether a single-hop BGP session should be allowed to setup if its 'related interface' is down.  If <code>single-hop-connected-check</code> is false, a single-hop BGP session (EBGP or IBGP) to any IPv4 or IPv6 neighbor address is permitted to establish if there is ANY valid (IPv6 global unicast, IPv4 link-local, or IPv4 global) route to that neighbor address, regardless of whether the 'related interface' is up or down.  If <code>single-hop-connected-check</code> is true (default value), a single-hop BGP session (EBGP or IBGP) to any IPv4 or IPv6 neighbor address is only
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permitted to transition from idle to a higher state if the 'related interface' is up.

The 'related interface' of a single hop peer is the subinterface associated with the IPv6 link local neighbor address or else the subinterface with a primary or secondary IP address and prefix-length that covers the neighbor address.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp transport single-hop-connected-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">single-hop-connected-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tcp-mss** *number*

<b>Description</b>	The maximum segment size of BGP TCP packets The actual value used in the transmit direction towards a particular peer should be checked at the neighbor level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp transport tcp-mss</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-mss</a>
<b>Range</b>	536 to 9446
<b>Default</b>	1024
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **under-maintenance** *boolean*

<b>Description</b>	State field to determine if the bgp instance is in maintenance mode.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp under-maintenance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">under-maintenance</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**bgp-evpn**

<b>Description</b>	Top-level configuration and operational state for BGP Ethernet Virtual Private Networks (EVPN)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn</a>
<b>Tree</b>	<a href="#">bgp-evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-instance id reference**

<b>Description</b>	bgp evpn instances configured in net-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id reference</a>
<b>Tree</b>	<a href="#">bgp-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**id reference**

<b>Description</b>	Enter the id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn bgp-instance id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state keyword**

<b>Description</b>	Configurable state of the bgp evpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id reference admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>

<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp number**

<b>Description</b>	The supported range of ECMP values for layer-2 aliasing (in mac-vrf or vpws instances) or layer-3 ecmp (in routed instances)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">ecmp number</a>
<b>Tree</b>	<a href="#">ecmp</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **encapsulation-type keyword**

<b>Description</b>	encap type of the bgp evpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">encapsulation-type keyword</a>
<b>Tree</b>	<a href="#">encapsulation-type</a>
<b>Default</b>	vxlan
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**evi number**

<b>Description</b>	EVPN Instance identifier associated to the bgp-evpn instance. Used for auto-derivation of: In addition, the evi value is used for the EVPN Multi-Homing Designated Forwarder (DF) Election.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">evi number</a>
<b>Tree</b>	<a href="#">evi</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**internal-tags**

<b>Description</b>	Configuration and state of internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">internal-tags</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">internal-tags set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

## mpls

<b>Description</b>	Enable the mpls context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bridge-table

<b>Description</b>	Enable the bridge-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ingress-multicast-mpls-label *number*

<b>Description</b>	The ingress label allocated for Broadcast, Unknown unicast and Multicast traffic  The ingress multicast mpls label is advertised by the EVPN Inclusive Multicast Ethernet Tag (IMET) route and it is expected on received EVPN packets that were generated as BUM packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table ingress-multicast-mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-multicast-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ingress-unicast-mpls-label *number*

<b>Description</b>	The ingress label allocated for unicast traffic
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The ingress unicast mpls label is advertised by the EVPN MAC/IP Advertisement routes and it is expected on received EVPN packets that were generated as unicast packets.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table ingress-unicast-mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-unicast-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multicast-destinations

<b>Description</b>	Enter the multicast-destinations context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations</a>
<b>Tree</b>	<a href="#">multicast-destinations</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## destination [tep \(ipv4-address | ipv6-address\)](#) [evi-label](#) *number* [tunnel-id](#) *number*

<b>Description</b>	Enter the destination list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations destination tep (ipv4-address   ipv6-address)</a> <a href="#">evi-label</a> <i>number</i> <a href="#">tunnel-id</a> <i>number</i>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [tep \(ipv4-address | ipv6-address\)](#)

<b>Description</b>	The IP address that identifies the remote EVPN Termination Endpoint (TEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations destination tep (ipv4-address   ipv6-address)</a> <a href="#">evi-label</a> <i>number</i> <a href="#">tunnel-id</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **evi-label** *number*

**Description** EVI label of the destination.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table multicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) *evi-label number tunnel-id number*

**Range** 16 to 1048575

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tunnel-id** *number*

**Description** tunnel identifier of the destination.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table multicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) *evi-label number tunnel-id number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-index** *number*

**Description** A system-wide unique identifier of this evpn-mpls destination object (system allocated).

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table multicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) *evi-label number tunnel-id number destination-index number*

**Tree** [destination-index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-forwarding** *keyword*

**Description** The type of multicast data forwarded by this evpn-mpls destination.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label</a> <i>number</i> <a href="#">tunnel-id</a> <i>number</i> <a href="#">multicast-forwarding</a> <i>keyword</i>
<b>Tree</b>	<a href="#">multicast-forwarding</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• BUM</li> <li>• unknown-unicast</li> <li>• broadcast-mcast</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **not-programmed-reason** *keyword*

<b>Description</b>	The reason why the destination is not programmed in the floodlist
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label</a> <i>number</i> <a href="#">tunnel-id</a> <i>number</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-destination-index</li> <li>• multicast-limit</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-limit**

<b>Description</b>	Multicast limits per vxlan interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations multicast-limit</a>
<b>Tree</b>	<a href="#">multicast-limit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-usage** *number*

<b>Description</b>	Maximum number of multicast vxlan-destinations in use on this bgp-evpn mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations multicast-limit current-usage</a> <i>number</i>
<b>Tree</b>	<a href="#">current-usage</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-entries** *number*

<b>Description</b>	Maximum number of multicast vxlan-destinations allowed on a bgp-evpn mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table multicast-destinations multicast-limit maximum-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**split-horizon-group** *reference*

<b>Description</b>	The split-horizon-group associated to the evpn-mpls instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table split-horizon-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">split-horizon-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table split-horizon-group name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	bridged and bt-split-horizon-groups and evpn-mpls-shg

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics</a>



<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of entries that are active on the evpn-mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on at least one slot.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-type** *type keyword*

<b>Description</b>	The type of the mac on the evpn-mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics mac-type</a> <i>type keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of entries of this type on the evpn-mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on at least one slot
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">failed-entries</a> <i>number</i>

<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs of this type, active and inactive, on the evpn-mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the evpn-mpls instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unicast-destinations**

<b>Description</b>	Enter the unicast-destinations context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations</a>
<b>Tree</b>	<a href="#">unicast-destinations</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination tep** (*ipv4-address* | *ipv6-address*) *evi-label number tunnel-id number*

<b>Description</b>	Enter the destination list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <a href="#">reference mpls bridge-table unicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <i>evi-label number tunnel-id number</i>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote EVPN Termination Endpoint (TEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <a href="#">reference mpls bridge-table unicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <i>evi-label number tunnel-id number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**evi-label** *number*

<b>Description</b>	EVI label of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <a href="#">reference mpls bridge-table unicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <i>evi-label number tunnel-id number</i>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-id** *number*

<b>Description</b>	tunnel identifier of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <a href="#">reference mpls bridge-table unicast-destinations destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <i>evi-label number tunnel-id number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### destination-index *number*

**Description** A system-wide unique identifier of this evpn-mpls destination object (system allocated).

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) [evi-label number tunnel-id number destination-index number](#)

**Tree** [destination-index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-table

**Description** Enter the mac-table context

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) [evi-label number tunnel-id number mac-table](#)

**Tree** [mac-table](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac [address](#) *string*

**Description** macs learnt on the bridging instance

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep](#) (*ipv4-address | ipv6-address*) [evi-label number tunnel-id number mac-table mac address](#) *string*

**Tree** [mac](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number mac-table mac address string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-slots number**

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number mac-table mac address string failed-slots number</a>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update string**

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number mac-table mac address string last-update string</a>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <a href="#">reference</a> <a href="#">mpls</a> <a href="#">bridge-table</a> <a href="#">unicast-destinations</a> <a href="#">destination</a> <a href="#">tep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">evi-label</a> <a href="#">number</a> <a href="#">tunnel-id</a> <a href="#">number</a> <a href="#">mac-table</a> <a href="#">mac</a> <a href="#">address</a> <a href="#">string</a> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <a href="#">reference</a> <a href="#">mpls</a> <a href="#">bridge-table</a> <a href="#">unicast-destinations</a> <a href="#">destination</a> <a href="#">tep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">evi-label</a> <a href="#">number</a> <a href="#">tunnel-id</a> <a href="#">number</a> <a href="#">mac-table</a> <a href="#">mac</a> <a href="#">address</a> <a href="#">string</a> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **not-programmed-reason** *keyword*

**Description** The reason why the evpn-mpls destination is not programmed.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep \(ipv4-address | ipv6-address\)](#) [evi-label number tunnel-id number not-programmed-reason](#) *keyword*

**Tree** [not-programmed-reason](#)

**Options**

- no-destination-index

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep \(ipv4-address | ipv6-address\)](#) [evi-label number tunnel-id number statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **active-entries** *number*

**Description** The total number of entries that are active on the sub-interface.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations destination tep \(ipv4-address | ipv6-address\)](#) [evi-label number tunnel-id number statistics active-entries](#) *number*

**Tree** [active-entries](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address)</a> <a href="#">evi-label number tunnel-id number statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-type** *type keyword*

<b>Description</b>	the type of the mac on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address)</a> <a href="#">evi-label number tunnel-id number statistics mac-type type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address)</a> <a href="#">evi-label number tunnel-id number statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> </ul>

- reserved
- eth-cfm
- irb-interface-vrrp

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-entries *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address)</a> <i>evi-label number tunnel-id number statistics mac-type type keyword active-entries number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-entries *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address)</a> <i>evi-label number tunnel-id number statistics mac-type type keyword failed-entries number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### total-entries *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-</a>

	<i>address</i> ) <i>evi-label number tunnel-id number statistics mac-type type keyword total-entries number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number statistics total-entries number</a>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**es-destination** *esi string*

<b>Description</b>	Enter the es-destination list instance
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations es-destination esi string</a>
<b>Tree</b>	<a href="#">es-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**esi** *string*

<b>Description</b>	The 10-byte Ethernet Segment Identifier of the ethernet segment. ESI-0 or MAX-ESI values are not allowed.
<b>Context</b>	<a href="#">network-instance name string protocols bgp-evpn bgp-instance id reference mpls bridge-table unicast-destinations es-destination esi string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination tep** (*ipv4-address* | *ipv6-address*) *evi-label number tunnel-id number*

<b>Description</b>	Add a list entry for destination
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote EVPN Termination Endpoint (TEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**evi-label number**

<b>Description</b>	EVI label of this next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-id number**

<b>Description</b>	tunnel identifier of the next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### destination-index *number*

**Description** A system-wide unique identifier of this evpn-mpls destination object (system allocated).

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [destination-index](#) *number*

**Tree** [destination-index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-table

**Description** Enter the mac-table context

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [mac-table](#)

**Tree** [mac-table](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac [address](#) *string*

**Description** macs learnt on the bridging instance

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [mac-table](#) [mac address](#) *string*

**Tree** [mac](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address *string*

**Description** Enter the address context

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-slots** *number*

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <b>failed-slots</b> <i>number</i>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-update** *string*

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <b>last-update</b> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <b>not-programmed-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### type keyword

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <b>type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <b>statistics</b>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-entries *number*

**Description** The total number of entries that are active on the sub-interface.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [statistics active-entries](#) *number*

**Tree** [active-entries](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-entries *number*

**Description** The total number of macs, which have not been programmed on atleast one slot

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [statistics failed-entries](#) *number*

**Tree** [failed-entries](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-type *type* *keyword*

**Description** the type of the mac on the sub-interface.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [mpls bridge-table unicast-destinations es-destination esi](#) *string* [statistics mac-type](#) *type* *keyword*

**Tree** [mac-type](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on at least one slot
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-word** *boolean*

<b>Description</b>	Configures the use of control-word for EVPN MPLS packets When set to true, the router pushes the control-word below the bottom of the stack label. This prevents the Provider routers from mistakenly decode the
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payload of EVPN packets as an IP header and misorder packets of the same flow.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### flow-label *boolean*

<b>Description</b>	Configures the use of flow-label for EVPN MPLS packets  When set to true, the router signals the use of the Flow Aware Transport (FAT) label in the F flag of the Layer 2 attributes extended community sent along with the EVPN routes (AD per EVI for VPWS or Inclusive Multicast Ethernet Tag route for MAC-VRF). For EVPN VPWS network instances, if the local and remote flags are set to 1 and match, the flow label is pushed at the bottom of the stack. On reception, the flow label is also expected and packets without it are dropped. If there is a mismatch between the local and remote F flags, the EVPN destination is removed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls flow-label</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-label</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop-resolution

<b>Description</b>	Options related to the resolution of IPv4 or IPv6 BGP next-hops to Tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**allowed-tunnel-types** *identityref*

<b>Description</b>	list of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution</a> <a href="#">allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Min. Elements</b>	1

**selection-attributes**

<b>Description</b>	Attributes for narrowing the selection of tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution</a> <a href="#">selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag**

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution</a> <a href="#">selection-attributes</a> <a href="#">tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route
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If false, it is possible to select a tunnel that has none or only some of the same tags as the route.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-table

<b>Description</b>	Enable the route-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls route-table</a>
<b>Tree</b>	<a href="#">route-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ingress-mpls-label *number*

<b>Description</b>	The ingress label allocated for Routed traffic The ingress mpls label is advertised by the Route-Type 5(RT5) route and it is expected on received routed EVPN packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">mpls route-table ingress-mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## oper-down-reason *keyword*

<b>Description</b>	The reason for the bgp-instance being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">oper-down-reason</a> <i>keyword</i>

<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-disabled</li> <li>• no-nexthop-address</li> <li>• no-evi</li> <li>• network-instance-oper-down</li> <li>• no-vxlan-interface</li> <li>• ethernet-segment-multiple-subinterfaces</li> <li>• vxlan_interface_no_source_ip_address</li> <li>• bgp-vpn-instance-oper-down</li> <li>• no-mpls-label</li> <li>• no-mcid</li> <li>• no-local-attachment-circuit</li> <li>• no-remote-attachment-circuit</li> <li>• tag-set-not-resolved</li> </ul>

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of bgp-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> </ul>

- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**routes****Description**

Enter the routes context

**Context**[network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [routes](#)**Tree**[routes](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bridge-table****Description**

Enable the bridge-table context

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## inclusive-mcast

<b>Description</b>	Enter the inclusive-mcast context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">inclusive-mcast</a>
<b>Tree</b>	<a href="#">inclusive-mcast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertise *boolean*

<b>Description</b>	If set to true an inclusive multicast route will be advertised in this evpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">inclusive-mcast</a> <a href="#">advertise</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## originating-ip (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The originating ip-address that the inclusive multicast route will be advertised with in this evpn instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">inclusive-mcast</a> <a href="#">originating-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">originating-ip</a>



<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-ip

<b>Description</b>	Enter the mac-ip context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">mac-ip</a>
<b>Tree</b>	<a href="#">mac-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertise *boolean*

<b>Description</b>	If set to true then local mac's and local mac-ip pairs will be advertised in this evpn instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">mac-ip</a> <a href="#">advertise</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertise-arp-nd-extended-community *boolean*

<b>Description</b>	ARP/ND extended community
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-evpn</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">routes</a> <a href="#">bridge-table</a> <a href="#">mac-ip</a> <a href="#">advertise-arp-nd-extended-community</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-arp-nd-extended-community</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertise-arp-nd-only-with-mac-table-entry *boolean*

**Description** If set to true then local mac-ip records will be advertised in this evpn instance only when we have a local mac in the mac-table

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference*  
[routes bridge-table mac-ip advertise-arp-nd-only-with-mac-table-entry](#) *boolean*

**Tree** [advertise-arp-nd-only-with-mac-table-entry](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop (*keyword* | *ipv4-address* | *ipv6-address*)

**Description** The ip-address that will be used as the bgp next-hop for all routes advertised in this evpn instance.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference*  
[routes bridge-table next-hop](#) (*keyword* | *ipv4-address* | *ipv6-address*)

**Tree** [next-hop](#)

**Default** use-system-ipv4-address

**Options**

- use-system-ipv4-address

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### vlan-aware-bundle-eth-tag *number*

**Description** Configures the Ethernet Tag ID to be encoded in the EVPN routes for control-plane interoperability mode with VLAN-aware bundle services. When set to a non-zero value, all the EVPN routes advertised for the MAC-VRF will be advertised with this value into the ethernet-tag-id field of the routes.

On reception of EVPN routes with non-zero ethernet-tag-id, BGP will import the routes based on the import route-target as usual. However, the system checks the received ethernet-tag-id field and will process only those routes whose ethernet-tag-id match the local vlan-aware-bundle-eth-tag value.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes bridge-table vlan-aware-bundle-eth-tag</a> <i>number</i>
<b>Tree</b>	<a href="#">vlan-aware-bundle-eth-tag</a>
<b>Range</b>	0 to 16777215
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-table

<b>Description</b>	Enable the route-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table</a>
<b>Tree</b>	<a href="#">route-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip-prefix

<b>Description</b>	Enter the ip-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix</a>
<b>Tree</b>	<a href="#">ip-prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## evpn-link-bandwidth

<b>Description</b>	Enter the evpn-link-bandwidth context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth</a>
<b>Tree</b>	<a href="#">evpn-link-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertise

<b>Description</b>	Enable the advertise context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth advertise</a>
<b>Tree</b>	<a href="#">advertise</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## maximum-dynamic-weight *number*

<b>Description</b>	Determines the maximum weight to be advertised in the evpn-link-bandwidth extended community  If weight 'dynamic' is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth advertise maximum-dynamic-weight</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-dynamic-weight</a>
<b>Range</b>	1 to 128
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**weight** (*number* | *keyword*)

<b>Description</b>	Determines the weight to be advertised in the evpn-link-bandwidth extended community  If set to dynamic, the weight is dynamically set based on the number of BGP PE-CE paths for the IP Prefix that is advertised in an EVPN IP Prefix route. Alternatively, the weight can be set to a fixed integer value in the range 1..128. The dynamic weight only considers BGP PE-CE paths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth advertise weight</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">weight</a>
<b>Range</b>	1 to 128
<b>Default</b>	dynamic
<b>Options</b>	<ul style="list-style-type: none"> <li>dynamic</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**weighted-ecmp**

<b>Description</b>	Enter the weighted-ecmp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth weighted-ecmp</a>
<b>Tree</b>	<a href="#">weighted-ecmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Setting enable triggers weighted ECMP programming for all eligible multipath EVPN IFL routes  When set to enable, the router processes the evpn-link-bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the ip-vrf route table. Flows to an IP Prefix received with a weight and a zero-ESI are sprayed based on the weight. If the EVPN IP Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not
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an integer). The command also enables the weighted ECMP functionality for BGP CEs that are configured with the parameter `evpn-link-bandwidth add-weight-to-received-bgp-routes <weight>`.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth weighted-ecmp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-ecmp-hash-buckets-per-next-hop-group** *number*

<b>Description</b>	Specifies the maximum number of ECMP hash buckets per next-hop-group. Weighted ECMP weights are normalized based on this number of hash buckets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table ip-prefix evpn-link-bandwidth weighted-ecmp max-ecmp-hash-buckets-per-next-hop-group</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-hash-buckets-per-next-hop-group</a>
<b>Range</b>	1 to 256
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac-ip**

<b>Description</b>	Enter the mac-ip context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">routes route-table mac-ip</a>
<b>Tree</b>	<a href="#">mac-ip</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertise-gateway-mac *boolean*

**Description** If set to true in an ip-vrf where bgp-evpn is enabled, a MAC/IP route containing the gateway-MAC is advertised.

This gateway-MAC matches the MAC advertised along with the EVPN IFL routes type 5 for the ip-vrf network-instance. This advertisement is needed so that the EVPN IFL (Interface-Less) model in the ip-vrf can interoperate with a remote system working in EVPN IFF (Interface-ful) Unnumbered mode.

**Context** [network-instance name](#) *string* [protocols bgp-evpn](#) [bgp-instance id](#) *reference* [routes route-table mac-ip advertise-gateway-mac](#) *boolean*

**Tree** [advertise-gateway-mac](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### vpws-attachment-circuits

**Description** Enable the vpws-attachment-circuits context

**Context** [network-instance name](#) *string* [protocols bgp-evpn](#) [bgp-instance id](#) *reference* [vpws-attachment-circuits](#)

**Tree** [vpws-attachment-circuits](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local

**Description** The local parameters of the VPWS

**Context** [network-instance name](#) *string* [protocols bgp-evpn](#) [bgp-instance id](#) *reference* [vpws-attachment-circuits local](#)

**Tree** [local](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-attachment-circuit** *name string*

<b>Description</b>	A local attachment circuit in the VPWS Each local attachment circuit is identified in EVPN with an Ethernet Tag that is advertised in the Auto Discovery per EVI route. Configurable on network instances of type vpws.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits local local-attachment-circuit name</a> <i>string</i>
<b>Tree</b>	<a href="#">local-attachment-circuit</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1
<b>Min. Elements</b>	1

**name** *string*

<b>Description</b>	The list of local attachment circuits in the network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits local local-attachment-circuit name</a> <i>string</i>
<b>String Length</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**connection-point** *reference*

<b>Description</b>	The connection-point associated to the local attachment circuit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits local local-attachment-circuit name</a> <i>string</i> <a href="#">connection-point</a> <i>reference</i>
<b>Tree</b>	<a href="#">connection-point</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**ethernet-tag** *number*

<b>Description</b>	The Ethernet Tag ID advertised in the Auto Discovery per EVI route
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The Ethernet Tag ID identifies the local attachment circuit in the EVPN control plane.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits local local-attachment-circuit name</a> <i>string</i> <a href="#">ethernet-tag</a> <i>number</i>
<b>Tree</b>	<a href="#">ethernet-tag</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ingress-mpls-label** *number*

<b>Description</b>	The ingress label allocated for EVPN VPWS traffic The ingress mpls label is advertised by the EVPN Auto-Discovery per EVI routes and it is expected on received EVPN packets for the VPWS network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits local local-attachment-circuit name</a> <i>string</i> <a href="#">ingress-mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **remote**

<b>Description</b>	The remote parameters of the VPWS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **remote-attachment-circuit** [name](#) *string*

<b>Description</b>	A remote attachment circuit in the VPWS Each remote attachment circuit is identified in EVPN with an Ethernet Tag that is received in the Auto Discovery per EVI route from the remote PE. Configurable on network instances of type vpws.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i>
<b>Tree</b>	<a href="#">remote-attachment-circuit</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1
<b>Min. Elements</b>	1

**name** *string*

<b>Description</b>	The list of remote attachment circuits in the network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i>
<b>String Length</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**connection-point** *reference*

<b>Description</b>	The connection-point associated to the local attachment circuit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">connection-point</a> <i>reference</i>
<b>Tree</b>	<a href="#">connection-point</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**destinations**

<b>Description</b>	Enter the destinations context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations</a>
<b>Tree</b>	<a href="#">destinations</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls**

<b>Description</b>	Enter the mpls context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination tep** (*ipv4-address | ipv6-address*) **evi-label number tunnel-id number**

<b>Description</b>	Enter the destination list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address that identifies the remote EVPN Termination Endpoint (TEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**evi-label number**

<b>Description</b>	EVI label of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">evi-label number tunnel-id number</a>
<b>Range</b>	16 to 1048575

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-id** *number*

<b>Description</b>	tunnel identifier of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-index** *number*

<b>Description</b>	A system-wide unique identifier of this evpn-mpls destination object (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id</a> <i>number</i> <a href="#">destination-index</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the evpn-mpls destination is not programmed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls destination tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi-label number tunnel-id</a> <i>number</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-destination-index</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**es-destination** *esi string*

<b>Description</b>	Enter the es-destination list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls es-destination esi</a> <i>string</i>
<b>Tree</b>	<a href="#">es-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**esi** *string*

<b>Description</b>	The 10-byte Ethernet Segment Identifier of the ethernet segment. ESI-0 or MAX-ESI values are not allowed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls es-destination esi</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination** *tep (ipv4-address | ipv6-address) evi-label number tunnel-id number*

<b>Description</b>	Add a list entry for destination
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls es-destination esi</a> <i>string</i> <a href="#">destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number</a>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** *(ipv4-address | ipv6-address)*

<b>Description</b>	The IP address that identifies the remote EVPN Termination Endpoint (TEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls es-destination esi</a> <i>string</i> <a href="#">destination tep (ipv4-address   ipv6-address) evi-label number tunnel-id number</a>
<b>Configurable</b>	False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **evi-label** *number*

**Description** EVI label of this next-hop.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [vpws-attachment-circuits remote remote-attachment-circuit name](#) *string* [destinations mpls es-destination esi](#) *string* [destination tep \(ipv4-address | ipv6-address\)](#) [evi-label number](#) [tunnel-id number](#)

**Range** 16 to 1048575

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tunnel-id** *number*

**Description** tunnel identifier of this next-hop.

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [vpws-attachment-circuits remote remote-attachment-circuit name](#) *string* [destinations mpls es-destination esi](#) *string* [destination tep \(ipv4-address | ipv6-address\)](#) [evi-label number](#) [tunnel-id number](#)

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-index** *number*

**Description** A system-wide unique identifier of this evpn-mpls destination object (system allocated).

**Context** [network-instance name](#) *string* [protocols bgp-evpn bgp-instance id](#) *reference* [vpws-attachment-circuits remote remote-attachment-circuit name](#) *string* [destinations mpls es-destination esi](#) *string* [destination-index number](#)

**Tree** [destination-index](#)

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **not-programmed-reason** *keyword*

**Description** The reason why the evpn-mpls destination is not programmed.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">destinations mpls es-destination esi</a> <i>string</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-destination-index</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ethernet-tag** *number*

<b>Description</b>	The Ethernet Tag ID received in the Auto Discovery per EVI route The Ethernet Tag ID identifies the remote attachment circuit in the EVPN control plane.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vpws-attachment-circuits remote remote-attachment-circuit name</a> <i>string</i> <a href="#">ethernet-tag</a> <i>number</i>
<b>Tree</b>	<a href="#">ethernet-tag</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **vxlan-interface** *reference*

<b>Description</b>	Identifier of vxlan-interface used in this bgp-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-evpn bgp-instance id</a> <i>reference</i> <a href="#">vxlan-interface</a> <i>reference</i>
<b>Tree</b>	<a href="#">vxlan-interface</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">vxlan-interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bgp-ipvpn**

<b>Description</b>	Top-level configuration and operational state for BGP IP Virtual Private Networks (IPVPN)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn</a>
<b>Tree</b>	<a href="#">bgp-ipvpn</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bgp-instance *id reference*

<b>Description</b>	bgp ipvpn instances configured in net-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-ipvpn</a> <a href="#">bgp-instance id reference</a>
<b>Tree</b>	<a href="#">bgp-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### id *reference*

<b>Description</b>	Enter the id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-ipvpn</a> <a href="#">bgp-instance id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-vpn</a> <a href="#">bgp-instance id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Configurable state of the bgp-ipvpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-ipvpn</a> <a href="#">bgp-instance id reference</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**ecmp number**

<b>Description</b>	The supported range of ECMP values for layer-3 ecmp.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">ecmp number</a>
<b>Tree</b>	<a href="#">ecmp</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**encapsulation-type keyword**

<b>Description</b>	Encap type of the bgp ipvpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">encapsulation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">encapsulation-type</a>
<b>Default</b>	mpls
<b>Options</b>	<ul style="list-style-type: none"> <li>• mpls</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls**

<b>Description</b>	Enable the mpls context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress-mpls-label number**

<b>Description</b>	The ingress label allocated for Routed traffic
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The ingress mpls label is advertised by the vpn route and it is expected on received routed packets.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls ingress-mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop-resolution

<b>Description</b>	Options related to the resolution of IPv4 or IPv6 BGP next-hops to Tunnels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## allowed-tunnel-types *identityref*

<b>Description</b>	List of allowed tunnel types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">bgp-next-hop-resolution-tunnel-type</a> Base type for the types of tunnels that can be used by BGP for next-hop resolution</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Min. Elements</b>	1

## selection-attributes

<b>Description</b>	Attributes for narrowing the selection of tunnels
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution selection-attributes</a>
<b>Tree</b>	<a href="#">selection-attributes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag**

<b>Description</b>	Next-hop resolution constraints based on internal tags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution selection-attributes tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mandatory** *boolean*

<b>Description</b>	If true, a tunnel can resolve the next-hop only if it has all the same tags as the route  If false, it is possible to select a tunnel that has none or only some of the same tags as the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">mpls next-hop-resolution selection-attributes tag mandatory</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mandatory</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason** *keyword*

<b>Description</b>	The reason for the bgp-instance being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-ipvpn bgp-instance id</a> <i>reference</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>admin-disabled</li> </ul>

- no-nexthop-address
- network-instance-oper-down
- bgp-vpn-instance-oper-down
- no-mpls-label
- tag-set-not-resolved

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword****Description**

This leaf contains the operational state of bgp-instance.

**Context**[network-instance name](#) *string* [protocols](#) [bgp-ipvpn](#) [bgp-instance id](#) *reference*  
[oper-state](#) *keyword***Tree**[oper-state](#)**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state

- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-vpn****Description**

Top-level configuration and operational state for common bgp-ipvpn and bgp-evpn parameters

**Context**[network-instance name](#) *string* [protocols bgp-vpn](#)**Tree**[bgp-vpn](#)**Configurable**

True

**Platforms**

Supported on all platforms

**backup-paths****Description**

Configuration of BGP VPN fast reroute

**Context**[network-instance name](#) *string* [protocols bgp-vpn backup-paths](#)**Tree**[backup-paths](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-unicast****Description**

Configuration of IPv4 unicast backup paths

**Context**[network-instance name](#) *string* [protocols bgp-vpn backup-paths ipv4-unicast](#)**Tree**[ipv4-unicast](#)**Configurable**

True

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<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### install *boolean*

<b>Description</b>	Install a backup path for every NLRI in the address family, when a suitable one exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn backup-paths ipv4-unicast install</a> <i>boolean</i>
<b>Tree</b>	<a href="#">install</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-unicast

<b>Description</b>	Configuration of IPv6 unicast backup paths
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn backup-paths ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### install *boolean*

<b>Description</b>	Install a backup path for every NLRI in the address family, when a suitable one exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn backup-paths ipv6-unicast install</a> <i>boolean</i>
<b>Tree</b>	<a href="#">install</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-instance id number**

<b>Description</b>	List of bgp-vpn instances configured in the network-instance. Only one instance allowed in the current release.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id number</a>
<b>Tree</b>	<a href="#">bgp-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	2

**id number**

<b>Description</b>	The index of the bgp-vpn instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id number</a>
<b>Range</b>	1 to 2
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-policy reference**

<b>Description</b>	Apply an export policy to advertised BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id number</a> <a href="#">export-policy reference</a>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

**import-policy reference**

<b>Description</b>	Apply an import policy to received BGP routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id number</a> <a href="#">import-policy reference</a>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	14

### **oper-down-reason** *keyword*

<b>Description</b>	Reason for bgp-instance being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-loopback-address-or-rd</li> <li>• no-autonomous-system-or-rt</li> <li>• network-instance-oper-down</li> <li>• bad-rd-format</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **route-distinguisher**

<b>Description</b>	Route Distinguisher (RD) of the bgp-vpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-distinguisher</a>
<b>Tree</b>	<a href="#">route-distinguisher</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **rd** (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*)

<b>Description</b>	Route Distinguisher (RD) in the bgp-vpn instance. When used for evpn and if not configured, the RD is auto-derived as <ip-address>:<evi> where 'ip-address' is the ipv4 address associated to the subinterface lo0.1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-distinguisher rd</a> ( <i>route-distinguisher-type-0</i>   <i>route-distinguisher-type-1</i>   <i>route-distinguisher-type-2</i>   <i>route-distinguisher-type-2b</i> )
<b>Tree</b>	<a href="#">rd</a>



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **route-distinguisher-origin** *keyword*

<b>Description</b>	Origin of the operational Route Distinguisher (RD) of the bgp-vpn instance. 'Auto-derived-from-evi' refers to an RD that is automatically allocated with the format <ip-address>:<evi> where 'ip-address' is the ipv4 address associated to the subinterface lo0.1. 'Auto-derived-from-system-ip:0' refers to the RD for the EVPN Ethernet Segment routes that is automatically allocated with the format <ip-address>:0 where 'ip-address' is the ipv4 address associated to the subinterface lo0.1. 'Manual' refers to an RD that is configured. 'None' indicates that the RD is neither configured nor auto-derived.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn bgp-instance id</a> <i>number</i> <a href="#">route-distinguisher route-distinguisher-origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">route-distinguisher-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-evi</li> <li>• auto-derived-from-system-ip:0</li> <li>• manual</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **route-target**

<b>Description</b>	Route Target (RT) of the bgp-vpn instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn bgp-instance id</a> <i>number</i> <a href="#">route-target</a>
<b>Tree</b>	<a href="#">route-target</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-route-target-origin** *keyword*

<b>Description</b>	Origin of the operational export Route Target (RT) of the bgp-vpn instance. 'Auto-derived-from-evi' refers to an RT that is automatically allocated with the format <asn>:<evi> where 'asn' is the autonomous-system-number configured in the network-instance default. 'Auto-derived-from-esi-bytes-1-
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6' refers to the ES-import RT for the EVPN Ethernet Segment routes that is derived from bytes 1 to 6 of the Ethernet Segment Identifier of the route. 'From-export-policy' refers to export RT(s) that are set on the export-policy. 'Manual' refers to an export RT that is configured. 'None' indicates that the export RT is neither configured nor auto-derived.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-target export-route-target-origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">export-route-target-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-evi</li> <li>• auto-derived-from-esi-bytes-1-6</li> <li>• from-export-policy</li> <li>• manual</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **export-rt** (*string* | *string* | *string* | *string* | *string* | *string* | *string* | *string*)

<b>Description</b>	Export Route Target (RT) in the bgp-vpn instance. When used for evpn and if not configured, the RT is auto-derived with the format <asn>:<evi> where 'asn' is the autonomous-system configured in the network-instance default.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-target export-rt</a> ( <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i> )
<b>Tree</b>	<a href="#">export-rt</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **import-route-target-origin** *keyword*

<b>Description</b>	Origin of the operational import Route Target (RT) of the bgp-vpn instance. 'Auto-derived-from-evi' refers to an RT that is automatically allocated with the format <asn>:<evi> where 'asn' is the autonomous-system-number configured in the network-instance default. 'Auto-derived-from-esi-bytes-1-6' refers to the ES-import RT for the EVPN Ethernet Segment routes that is derived from bytes 1 to 6 of the Ethernet Segment Identifier of the route. 'From-import-policy' refers to import RT(s) that are set on the import-policy. 'Manual' refers to an import RT that is configured. 'None' indicates that the import RT is neither configured nor auto-derived.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-target import-route-target-origin</a> <i>keyword</i>

<b>Tree</b>	<a href="#">import-route-target-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-evi</li> <li>• auto-derived-from-esi-bytes-1-6</li> <li>• from-import-policy</li> <li>• manual</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **import-rt** (*string* | *string* | *string* | *string* | *string* | *string* | *string* | *string*)

<b>Description</b>	Import Route Target (RT) in the bgp-vpn instance. When used for evpn and if not configured, the RT is auto-derived with the format <asn>:<evi> where 'asn' is the autonomous-system configured in the network-instance default.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i> <a href="#">route-target import-rt</a> ( <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i> )
<b>Tree</b>	<a href="#">import-rt</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **combined-ecmp**

<b>Description</b>	<p>Combine BGP owners into the same ECMP set</p> <p>When enabled, candidate BGP PE-CE routes and BGP VPN routes (EVPN IFL or VPN-IP) to the same prefix are combined into a single ECMP set. A single route with a combined next hop group is installed in the route table. If different BGP owners are combined and have different configured ecmp maximum values, the minimum of the maximum configured values is considered for the combined ECMP set.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-vpn</a> <a href="#">combined-ecmp</a>
<b>Tree</b>	<a href="#">combined-ecmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gribi**

<b>Description</b>	Container for gRIBI configuration and state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi</a>
<b>Tree</b>	<a href="#">gribi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable gRIBI support.  The enable setting only has an effect when the network-instance type is ip-vrf or default.  When this is set to disable all IP entries and next-hop-groups associated with the network-instance are deleted from the gRIBI server database and the recovery of this state depends on the gRIBI clients to re-signal all of the deleted entries. While in a disabled state, no entries are accepted for this network-instance. (This is the same behavior when the network-instance does not exist at all.)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**default-metric** *number*

<b>Description</b>	Set the route table metric to use for all gRIBI-created IPv4 and IPv6 routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**default-preference** *number*

<b>Description</b>	Lower values indicate a higher degree of preference when deciding the route to use from different protocols.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi default-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">default-preference</a>
<b>Range</b>	0 to 255
<b>Default</b>	6
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**max-ecmp-hash-buckets-per-next-hop-group** *number*

<b>Description</b>	Specifies the maximum number of ECMP hash buckets per next-hop-group. An error is returned to any gRIBI client that attempts to program more than this number of next-hops in a single next-hop-group. Weighted ECMP weights are normalized based on this number of hash buckets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi max-ecmp-hash-buckets-per-next-hop-group</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-hash-buckets-per-next-hop-group</a>
<b>Range</b>	1 to 256
<b>Default</b>	256
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**maximum-routes** *number*

<b>Description</b>	Specifies the maximum number of gRIBI routes (sum of IPv4 and IPv6 entries). A value of 0 signifies no limit.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols gribi maximum-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-routes</a>
<b>Default</b>	0
<b>Configurable</b>	True

---

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **oper-state** *keyword*

**Description** The operational state of gRIBI with respect to programming of entries in this network network-instance

By default, even with no configuration, the state is up in all network-instances of type ip-vrf and default

**Context** [network-instance name](#) *string* [protocols gribi oper-state](#) *keyword*

**Tree** [oper-state](#)

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## igmp

<b>Description</b>	Enable the igmp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp</a>
<b>Tree</b>	<a href="#">igmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable the IGMP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-count *number*

<b>Description</b>	The number of multicast groups which have been learned on this instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp group-count</a> <i>number</i>

<b>Tree</b>	<a href="#">group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface [interface-name](#) *string*

<b>Description</b>	List of IGMP interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Administratively enable or disable the IGMP protocol for this interface Used to administratively enable or disable the IGMP protocol on a routed subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True



**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-count *number*

**Description** The number of multicast groups which have been learned on this interface

**Context** [network-instance name](#) *string* [protocols igmp](#) [interface interface-name](#) *string* [group-count](#) *number*

**Tree** [group-count](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### import-policy *reference*

**Description** Apply an import policy. The length of the policy name should not exceed 32 characters

**Context** [network-instance name](#) *string* [protocols igmp](#) [interface interface-name](#) *string* [import-policy](#) *reference*

**Tree** [import-policy](#)

**Reference** [routing-policy policy name](#) *string*

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-number-group-sources *number*

**Description** MAX number of IGMP group/source combinations for this interface, 0 means no limit

**Context** [network-instance name](#) *string* [protocols igmp](#) [interface interface-name](#) *string* [maximum-number-group-sources](#) *number*

**Tree** [maximum-number-group-sources](#)

**Range** 1 to 4096

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-groups** *number*

<b>Description</b>	MAX number of IGMP Groups for this interface, 0 means no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-groups</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-sources** *number*

<b>Description</b>	MAX number of IGMP sources per group for this interface, 0 means no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-sources</a>
<b>Range</b>	1 to 512
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**membership-groups**

<b>Description</b>	List of IGMP Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">filter-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-type** *keyword*

**Description** Enter the group-type context

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [membership-groups group group](#) *string* **group-type** *keyword*

**Tree** [group-type](#)

**Options**

- static  
This group entry was statically configured.
- dynamic  
This group entry was learned by the protocol.
- bgp-smet  
This group entry was learned from a bgp SMET route.
- bgp-sync  
This group entry was learned from a bgp JOIN SYNC route.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **igmp-compatibility-mode** *keyword*

**Description** Compatibility with older version routers

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [membership-groups group group](#) *string* **igmp-compatibility-mode** *keyword*

**Tree** [igmp-compatibility-mode](#)

**Options**

- 1
- 2
- 3

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-reporter** (*ipv4-address* | *ipv6-address*)

**Description** The last host address which has sent the report to join the multicast group

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">last-reporter (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">last-reporter</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-state** *keyword*

<b>Description</b>	Traffic forwarding state on this port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <b>forwarding-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• block</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-type** *keyword*

<b>Description</b>	Enter the source-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <b>source-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static This group entry was statically configured.</li> <li>• dynamic This group entry was learned by the protocol.</li> <li>• bgp-smet This group entry was learned from a bgp SMET route.</li> <li>• bgp-sync This group entry was learned from a bgp JOIN SYNC route.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <b>up-time</b> <i>string</i>

<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v1-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 1 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">v1-host-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v2-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 2 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">v2-host-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	The operational state of the IGMP interface. This simply tracks the operational state of the subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting</li> </ul>



Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-version** *number*

<b>Description</b>	The operational IGMP version on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">oper-version</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-version</a>
<b>Range</b>	1 to 3
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **querier**

<b>Description</b>	Enter the querier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">querier</a>
<b>Tree</b>	<a href="#">querier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** *string*

<b>Description</b>	The address of the IGMP Querier on the IP subnet to which this interface is attached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">querier address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **expiry-time** *number*

**Description** The time remaining before this querier is aged out

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [querier expiry-time](#) *number*

**Tree** [expiry-time](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-time** *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [querier up-time](#) *string*

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **query-interval** *number*

**Description** Interval at which the router sends the IGMP membership queries

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [query-interval](#) *number*

**Tree** [query-interval](#)

**Range** 2 to 1024

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-last-member-interval** *number*

<b>Description</b>	Interval at which Group-Specific-Query packets are transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-last-member-interval</a>
<b>Range</b>	1 to 1023
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-response-interval** *number*

<b>Description</b>	Time to wait to receive a response to the IGMP membership query from the host
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-response-interval</a>
<b>Range</b>	1 to 1023
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-alert-check** *boolean*

<b>Description</b>	Enable or disable router alert checking for IGMP messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">router-alert-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	Container to configure Source specific multicast (SSM) options.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mappings

<b>Description</b>	A list of source specific multicast (SSM) mappings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">ssm mappings</a>
<b>Tree</b>	<a href="#">mappings</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-range [start string end string](#)

<b>Description</b>	A Source Specific Multicast (SSM) mapping  This allows IGMP v2 hosts to be able to join in SSM environments by translating IGMP v2 reports into IGMP v3 reports. The request in an IGMP v2 join is sent toward the source address found by matching the multicast address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">ssm mappings group-range start string end string</a>
<b>Tree</b>	<a href="#">group-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## start *string*

<b>Description</b>	Start of the group range.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">ssm mappings group-range start string end string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end string**

<b>Description</b>	End of the group range.
<b>Context</b>	<a href="#">network-instance name string protocols igmp interface interface-name string ssm mappings group-range start string end string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source source string**

<b>Description</b>	Multicast source address list
<b>Context</b>	<a href="#">network-instance name string protocols igmp interface interface-name string ssm mappings group-range start string end string source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Min. Elements</b>	1

**source string**

<b>Description</b>	Multicast source address
<b>Context</b>	<a href="#">network-instance name string protocols igmp interface interface-name string ssm mappings group-range start string end string source source string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static-membership-groups**

<b>Description</b>	Container to configure static <S,G>s for this interface
<b>Context</b>	<a href="#">network-instance name string protocols igmp interface interface-name string static-membership-groups</a>
<b>Tree</b>	<a href="#">static-membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range** *start string end string*

<b>Description</b>	Enter the group-range list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string end string</i>
<b>Tree</b>	<a href="#">group-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start** *string*

<b>Description</b>	Start of the group range.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string end string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end** *string*

<b>Description</b>	End of the group range.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string end string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *source string*

<b>Description</b>	Multicast source address list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string end string</i> <a href="#">source</a> <i>source string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *string*

<b>Description</b>	Multicast source address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**starg**

<b>Description</b>	any source address (*,G)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group-range start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">starg</a>
<b>Tree</b>	<a href="#">starg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Global IGMP statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**error**

<b>Description</b>	Error message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error</a>
<b>Tree</b>	<a href="#">error</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bad-encoding *number*

**Description** Badly encoded

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [statistics error bad-encoding](#) *number*

**Tree** [bad-encoding](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bad-length *number*

**Description** Bad length

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [statistics error bad-length](#) *number*

**Tree** [bad-length](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### import-policy-drops *number*

**Description** Number of times we matched the host IP address or group or source addresses specified in the import policy.

**Context** [network-instance name](#) *string* [protocols igmp interface interface-name](#) *string* [statistics error import-policy-drops](#) *number*

**Tree** [import-policy-drops](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**local-scope** *number*

<b>Description</b>	Link-local scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error local-scope</a> <i>number</i>
<b>Tree</b>	<a href="#">local-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**missing-router-alert** *number*

<b>Description</b>	Router alert flag is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error missing-router-alert</a> <i>number</i>
<b>Tree</b>	<a href="#">missing-router-alert</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**non-local** *number*

<b>Description</b>	Non-local sender source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error non-local</a> <i>number</i>
<b>Tree</b>	<a href="#">non-local</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-of-memory-drops** *number*

<b>Description</b>	Number of times a join is dropped because we ran out of memory
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error out-of-memory-drops</a> <i>number</i>

<b>Tree</b>	<a href="#">out-of-memory-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reached-maximum-number-group-sources** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number group-source combinations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-group-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reached-maximum-number-groups** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number of groups.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-groups</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reached-maximum-number-sources** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number of sources per group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-sources</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reserved-scope *number*

<b>Description</b>	Reserved scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error reserved-scope number</a>
<b>Tree</b>	<a href="#">reserved-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-type *number*

<b>Description</b>	Unknown type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error unknown-type number</a>
<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### wrong-version *number*

<b>Description</b>	Wrong version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics error wrong-version number</a>
<b>Tree</b>	<a href="#">wrong-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multicast-states**

<b>Description</b>	Multicast state count for this network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states</a>
<b>Tree</b>	<a href="#">multicast-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-group-entries** *number*

<b>Description</b>	The number of (S,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states source-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">source-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**star-group-entries** *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states star-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">star-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received**

<b>Description</b>	Received message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received</a>
<b>Tree</b>	<a href="#">received</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**drops** *number*

<b>Description</b>	Total number of dropped packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received drops</a> <i>number</i>
<b>Tree</b>	<a href="#">drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**leaves** *number*

<b>Description</b>	Leaves
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received leaves</a> <i>number</i>
<b>Tree</b>	<a href="#">leaves</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received v2-reports</a> <i>number</i>

<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v3-reports** *number*

<b>Description</b>	V3 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics received v3-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v3-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted**

<b>Description</b>	Transmit message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**errors** *number*

<b>Description</b>	Transmission Errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics transmitted errors</a> <i>number</i>
<b>Tree</b>	<a href="#">errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics transmitted general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subnet-check** *boolean*

<b>Description</b>	This command enables subnet checking for IGMP messages received on this interface
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All IGMP packets with a source address that is not in the local subnet are dropped.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">subnet-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">subnet-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### version *number*

<b>Description</b>	IGMP Version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">version</a> <i>number</i>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 3
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### membership-groups

<b>Description</b>	List of IGMP Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group *string*

**Description** Multicast address

**Context** [network-instance name \*string\*](#) [protocols igmp membership-groups group \*group string\*](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source [source \*string\*](#)

**Description** Source addresses of multicast

**Context** [network-instance name \*string\*](#) [protocols igmp membership-groups group \*group string source source string\*](#)

**Tree** [source](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source *string*

**Description** Source address of multicast

**Context** [network-instance name \*string\*](#) [protocols igmp membership-groups group \*group string source source string\*](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### blocked-interface [interface-name \*string\*](#)

**Description** Add a list entry for blocked-interface

**Context** [network-instance name \*string\*](#) [protocols igmp membership-groups group \*group string source string blocked-interface interface-name string\*](#)

**Tree** [blocked-interface](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

**Description** Reference to a specific subinterface of the form <interface-name>.<subinterface-index>

**Context** [network-instance name](#) *string* [protocols igmp membership-groups group group](#) *string* [source source](#) *string* [blocked-interface interface-name](#) *string*

**String Length** 5 to 25

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-interface [interface-name](#) *string*

**Description** Add a list entry for forwarding-interface

**Context** [network-instance name](#) *string* [protocols igmp membership-groups group group](#) *string* [source source](#) *string* [forwarding-interface interface-name](#) *string*

**Tree** [forwarding-interface](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

**Description** Reference to a specific subinterface of the form <interface-name>.<subinterface-index>

**Context** [network-instance name](#) *string* [protocols igmp membership-groups group group](#) *string* [source source](#) *string* [forwarding-interface interface-name](#) *string*

**String Length** 5 to 25

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

**Description** Used to report operational state of the IGMP instance

**Context** [network-instance name](#) *string* [protocols igmp oper-state](#) *keyword*

<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-interval** *number*

<b>Description</b>	Interval at which the router sends the IGMP membership queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-interval</a>
<b>Range</b>	2 to 1024
<b>Default</b>	125
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-last-member-interval** *number*

<b>Description</b>	Interval at which Group-Specific-Query packets are transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp query-last-member-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-last-member-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-response-interval** *number*

<b>Description</b>	Time to wait to receive a response to the IGMP membership query from the host
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp query-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-response-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**robust-count** *number*

<b>Description</b>	Tune IGMP robustness to allow for expected packet loss  The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	2 to 10
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	Container to configure Source specific multicast (SSM) options.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mappings**

<b>Description</b>	A list of source specific multicast (SSM) mappings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp ssm mappings</a>
<b>Tree</b>	<a href="#">mappings</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range** [start](#) *string* [end](#) *string*

<b>Description</b>	A Source Specific Multicast (SSM) mapping  This allows IGMP v2 hosts to be able to join in SSM environments by translating IGMP v2 reports into IGMP v3 reports. The request in an IGMP
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v2 join is sent toward the source address found by matching the multicast address.

**Context** [network-instance name](#) *string* [protocols igmp ssm mappings group-range start](#) *string* [end](#) *string*

**Tree** [group-range](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **start** *string*

**Description** Start of the group range.

**Context** [network-instance name](#) *string* [protocols igmp ssm mappings group-range start](#) *string* [end](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end** *string*

**Description** End of the group range.

**Context** [network-instance name](#) *string* [protocols igmp ssm mappings group-range start](#) *string* [end](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** [source](#) *string*

**Description** Multicast source address list

**Context** [network-instance name](#) *string* [protocols igmp ssm mappings group-range start](#) *string* [end](#) *string* [source](#) [source](#) *string*

**Tree** [source](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Min. Elements** 1

**source string**

<b>Description</b>	Multicast source address
<b>Context</b>	<a href="#">network-instance name string protocols igmp ssm mappings group-range start string end string source source string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name string protocols igmp trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace**

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name string protocols igmp trace-options trace</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface**

<b>Description</b>	Enable tracing interface events
<b>Context</b>	<a href="#">network-instance name string protocols igmp trace-options trace interface</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**all**

<b>Description</b>	Trace for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp trace-options trace interface all</a>
<b>Tree</b>	<a href="#">all</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name *reference***

<b>Description</b>	Trace for interface with this name
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp trace-options trace interface name <i>reference</i></a>
<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**packet**

<b>Description</b>	Trace IGMP Packet types Only one type can be enabled at a time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp trace-options trace packet</a>
<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface**

<b>Description</b>	Enable interface filter for packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp trace-options trace packet interface</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all

**Description** Trace for all interfaces

**Context** [network-instance name](#) *string* [protocols igmp](#) [trace-options](#) [trace packet](#) [interface all](#)

**Tree** [all](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *reference*

**Description** Trace for interface with this name

**Context** [network-instance name](#) *string* [protocols igmp](#) [trace-options](#) [trace packet](#) [interface name](#) *reference*

**Tree** [name](#)

**Reference** [network-instance name](#) *string* [protocols igmp](#) [interface interface-name](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## modifier *keyword*

**Description** Enter the modifier context

**Context** [network-instance name](#) *string* [protocols igmp](#) [trace-options](#) [trace packet](#) [modifier](#) *keyword*

**Tree** [modifier](#)

**Default** egress-ingress-and-dropped

**Options**

- dropped  
Enable tracing for the packets which are dropped
- ingress-and-dropped  
Enable tracing for the packets which are sent or received
- egress-ingress-and-dropped  
Enable tracing for the packets which are sent, received or dropped

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">igmp</a> <a href="#">trace-options</a> <a href="#">trace</a> <a href="#">packet</a> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Enable tracing of all IGMP packets</li> <li>• query Enable tracing of IGMP Query packets</li> <li>• v1-report Enable tracing of IGMP version 1 Report packets</li> <li>• v2-report Enable tracing of IGMP version 2 Report packets</li> <li>• v2-leave Enable tracing of IGMP version 2 Leave packets</li> <li>• v3-report Enable tracing of IGMP version 3 Report packets</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **igmp-snooping**

<b>Description</b>	Enable the igmp-snooping context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">igmp-snooping</a>
<b>Tree</b>	<a href="#">igmp-snooping</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the IGMP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface** [interface-name](#) *string*

<b>Description</b>	List of IGMP interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**fast-leave** *boolean*

<b>Description</b>	Allow IGMP fast leave processing
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When enabled, the multicast state is removed immediately upon receiving an IGMP leave message.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">fast-leave</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fast-leave</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **import-policy** *reference*

<b>Description</b>	Apply an import policy. The length of the policy name should not exceed 32 characters.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **is-mrouter-port** *boolean*

<b>Description</b>	Interface is a multicast router port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">is-mrouter-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-mrouter-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **maximum-number-group-sources** *number*

<b>Description</b>	Maximum number of IGMP group/source combinations for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>

<b>Tree</b>	<a href="#">maximum-number-group-sources</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **maximum-number-groups** *number*

<b>Description</b>	Maximum number of IGMP Groups for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-groups</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **maximum-number-sources** *number*

<b>Description</b>	Maximum number of IGMP sources per group for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-sources</a>
<b>Range</b>	1 to 512
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **membership-group-count** *number*

<b>Description</b>	The number of multicast groups which have been learned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## membership-groups

<b>Description</b>	List of IGMP Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *string*

<b>Description</b>	Multicast address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## expiry-time *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **filter-mode** *keyword*

**Description** Enter the filter-mode context

**Context** [network-instance name](#) *string* [protocols igmp-snooping interface interface-name](#) *string* [membership-groups group group](#) *string* **filter-mode** *keyword*

**Tree** [filter-mode](#)

**Options**

- include

In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter

- exclude

In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **group-type** *keyword*

**Description** Enter the group-type context

**Context** [network-instance name](#) *string* [protocols igmp-snooping interface interface-name](#) *string* [membership-groups group group](#) *string* **group-type** *keyword*

**Tree** [group-type](#)

**Options**

- static

This group entry was statically configured.

- dynamic

This group entry was learned by the protocol.

- bgp-smet

This group entry was learned from a bgp SMET route.

- bgp-sync

This group entry was learned from a bgp JOIN SYNC route.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**igmp-compatibility-mode** *keyword*

<b>Description</b>	Compatibility with older version routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">igmp-compatibility-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">igmp-compatibility-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### forwarding-state *keyword*

<b>Description</b>	Traffic forwarding state on this port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">forwarding-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• block</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source-type *keyword*

<b>Description</b>	Enter the source-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">source-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static This group entry was statically configured.</li> <li>• dynamic This group entry was learned by the protocol.</li> <li>• bgp-smet This group entry was learned from a bgp SMET route.</li> <li>• bgp-sync This group entry was learned from a bgp JOIN SYNC route.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time string**

**Description** The time elapsed since this entry was created

**Context** [network-instance name string](#) [protocols igmp-snooping interface interface-name string](#) [membership-groups group group string](#) [source source string](#) [up-time string](#)

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time string**

**Description** The time elapsed since this entry was created

**Context** [network-instance name string](#) [protocols igmp-snooping interface interface-name string](#) [membership-groups group group string](#) [up-time string](#)

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-host-timer number**

**Description** The time remaining until the local router will assume that there are no longer any version 1 members

**Context** [network-instance name string](#) [protocols igmp-snooping interface interface-name string](#) [membership-groups group group string](#) [v1-host-timer number](#)

**Tree** [v1-host-timer](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 2 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">v2-host-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mrouter-port** *boolean*

<b>Description</b>	Operate port as a multicast router port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">mrouter-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mrouter-port</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-interval** *number*

<b>Description</b>	Interval at which the router sends the IGMP membership queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-interval</a>
<b>Range</b>	2 to 1024
<b>Default</b>	125
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-last-member-interval** *number*

<b>Description</b>	Interval at which Group-Specific-Query packets are transmitted
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When used along with EVPN multi-homing, the result of this value multiplied by the interface robust-count must be a value equal to or less than 25.5 seconds. This is due to the fact that the maximum response time field in the EVPN Multicast Leave Synch route has a limit of 255 units of 1/10 second, and this field encodes the result of  $[(\text{query-last-member-interval} * 10) * \text{robust-count}]$ .

If the result of that operation is greater than 255, the maximum response time in the EVPN Multicast Leave Synch route is still 255.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-last-member-interval</a>
<b>Range</b>	1 to 5
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **query-response-interval** *number*

<b>Description</b>	Time to wait to receive a response to the IGMP membership query from the host
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-response-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **robust-count** *number*

<b>Description</b>	<p>Tune IGMP robustness to allow for expected packet loss</p> <p>The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.</p> <p>When used along with EVPN multi-homing, the result of this value multiplied by the interface query-last-member-interval must be a value equal to or less than 25.5 seconds. This is due to the fact that the maximum response time field in the EVPN Multicast Leave Synch route has a limit of 255 units of 1/10</p>
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second, and this field encodes the result of  $[(\text{query-last-member-interval} * 10) * \text{robust-count}]$ .

If the result of that operation is greater than 255, the maximum response time in the EVPN Multicast Leave Synch route is still 255.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	2 to 10
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **router-alert-check** *boolean*

<b>Description</b>	Enable or disable router alert checking for IGMP messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">router-alert-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **send-queries** *boolean*

<b>Description</b>	Generate IGMP general queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">send-queries</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send-queries</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**static-membership-groups**

<b>Description</b>	Container to configure static <S,G>s for this interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups</a>
<b>Tree</b>	<a href="#">static-membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** [group](#) *string*

<b>Description</b>	Enter the group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	group address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Multicast source address list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *string*

**Description** Multicast source address.

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [static-membership-groups group group \*string\*](#) [source source \*string\*](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### starg

**Description** any source address (\*,G)

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [static-membership-groups group group \*string\*](#) [starg](#)

**Tree** [starg](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### statistics

**Description** IGMP sub-interface statistics

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### error

**Description** Error message statistics

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [statistics error](#)

**Tree** [error](#)



<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-encoding** *number*

<b>Description</b>	Badly encoded packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-encoding</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-encoding</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-igmp-checksum** *number*

<b>Description</b>	Number of times a packet is discarded because of a bad IGMP header checksum
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-igmp-checksum</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-igmp-checksum</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-length** *number*

<b>Description</b>	Bad length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**discarded-bgp-join-sync** *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error discarded-bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-bgp-join-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**discarded-bgp-leave-sync** *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error discarded-bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**import-policy-drops** *number*

<b>Description</b>	Number of times the host IP address or group or source IP addresses specified in the import policy are matched
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error import-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">import-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-scope number**

<b>Description</b>	Link-local scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error local-scope</a> <i>number</i>
<b>Tree</b>	<a href="#">local-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**missing-router-alert number**

<b>Description</b>	Router alert flag is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error missing-router-alert</a> <i>number</i>
<b>Tree</b>	<a href="#">missing-router-alert</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**out-of-memory-discarded-packets number**

<b>Description</b>	Number of times a join is discarded because the router ran out of memory
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error out-of-memory-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-of-memory-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**reached-maximum-number-group-sources number**

<b>Description</b>	Number of times a join is discarded because the maximum number of group-source combinations is reached
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-group-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **reached-maximum-number-groups** *number*

<b>Description</b>	Number of times a join is discarded because the maximum number of groups is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-groups</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **reached-maximum-number-sources** *number*

<b>Description</b>	Number of times a join is discarded because the maximum number of sources per group is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **send-query-configured-discarded-packets** *number*

<b>Description</b>	Number of times a query is discarded because send-queries is configured in the sub-interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error send-query-configured-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">send-query-configured-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **unknown-type** *number*

<b>Description</b>	Unknown type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error unknown-type</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **wrong-version** *number*

<b>Description</b>	Wrong version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error wrong-version</a> <i>number</i>
<b>Tree</b>	<a href="#">wrong-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **zero-source-ip-address** *number*

<b>Description</b>	Number of times a packet is discarded because it has a zero source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error zero-source-ip-address</a> <i>number</i>
<b>Tree</b>	<a href="#">zero-source-ip-address</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## forwarded

<b>Description</b>	Forward message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded</a>
<b>Tree</b>	<a href="#">forwarded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## error-packets *number*

<b>Description</b>	Forwarding Errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## general-queries *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded leave-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**unknown-type** *number*

<b>Description</b>	Unknown IGMP types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded unknown-type</a> <i>number</i>

<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v3-reports** *number*

<b>Description</b>	V3 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded v3-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v3-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**multicast-states**

<b>Description</b>	Multicast state count for this network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states</a>
<b>Tree</b>	<a href="#">multicast-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-group-entries** *number*

<b>Description</b>	The number of (S,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states source-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">source-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**star-group-entries** *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states star-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">star-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**received**

<b>Description</b>	Received message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received</a>
<b>Tree</b>	<a href="#">received</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bgp-join-sync** *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-join-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bgp-leave-sync** *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **discarded-packets** *number*

<b>Description</b>	Total number of discarded IGMP packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received leave-messages</a> <i>number</i>

<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v3-reports** *number*

<b>Description</b>	V3 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received v3-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v3-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## transmitted

<b>Description</b>	Transmit message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## bgp-join-sync *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a> <a href="#">bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-join-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## bgp-leave-sync *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a> <a href="#">bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## error-packets *number*

<b>Description</b>	Transmission error IGMP packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a> <a href="#">error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">error-packets</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### general-queries *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group-queries *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group-source-queries *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted leave-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v3-reports** *number*

<b>Description</b>	V3 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted v3-reports</a> <i>number</i>

<b>Tree</b>	<a href="#">v3-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version number**

<b>Description</b>	IGMP Version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">version number</a>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 3
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**multicast-routers** [address string](#)

<b>Description</b>	Enter the multicast-router list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i>
<b>Tree</b>	<a href="#">multicast-routers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address string**

<b>Description</b>	The source IP address used by queries sent out by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**expiry-time** *number*

<b>Description</b>	The time remaining before this multicast router is aged out
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <b>expiry-time</b> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**igmp-v3-states**

<b>Description</b>	Enter the igmp-v3-states context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <b>igmp-v3-states</b>
<b>Tree</b>	<a href="#">igmp-v3-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-query-interval** *number*

<b>Description</b>	The General Query Interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">igmp-v3-states general-query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-query-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-response-interval** *number*

<b>Description</b>	The General Query Response interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">igmp-v3-states general-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-response-interval</a>

<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	The Robust Count value used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">igmp-v3-states robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface** *string*

<b>Description</b>	Interface behind which this multicast router is located
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">interface</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time since this multicast router has been known in this service
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version number**

<b>Description</b>	The version of the protocol that is sent by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping multicast-routers address</a> <i>string</i> <a href="#">version number</a>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 3
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-state keyword**

<b>Description</b>	Used to report operational state of the IGMP instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> </ul>

- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### proxy-evpn-membership-group-count *number*

<b>Description</b>	The number of multicast groups proxy-evpn-membership-groups
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-evpn-membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">proxy-evpn-membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### proxy-evpn-membership-groups

<b>Description</b>	EVPN Proxy Database created for the network-instance The content of this table is used by the router to proxy the reports towards the remote PEs via BGP EVPN SMET (Selective Multicast Ethernet Tag) routes .
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups</a>
<b>Tree</b>	<a href="#">proxy-evpn-membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *group string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group</a> <i>group string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group</a> <i>group string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group</a> <i>group string filter-mode keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *source string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group group string</a> <a href="#">source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group group string</a> <a href="#">source source string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group group string</a> <a href="#">source source string</a> <a href="#">up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping proxy-evpn-membership-groups group group string</a> <a href="#">up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-support** *boolean*

**Description** IGMP Version 1 is supported

**Context** [network-instance name](#) *string* [protocols igmp-snooping proxy-evpn-membership-groups group group](#) *string* **v1-support** *boolean*

**Tree** [v1-support](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v2-support** *boolean*

**Description** IGMP Version 2 is supported

**Context** [network-instance name](#) *string* [protocols igmp-snooping proxy-evpn-membership-groups group group](#) *string* **v2-support** *boolean*

**Tree** [v2-support](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v3-support** *boolean*

**Description** IGMP Version 3 is supported

**Context** [network-instance name](#) *string* [protocols igmp-snooping proxy-evpn-membership-groups group group](#) *string* **v3-support** *boolean*

**Tree** [v3-support](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **proxy-membership-group-count** *number*

**Description** The number of multicast groups which have been learned

**Context** [network-instance name](#) *string* [protocols igmp-snooping proxy-membership-group-count](#) *number*

<b>Tree</b>	<a href="#">proxy-membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## proxy-membership-groups

<b>Description</b>	Proxy Database created for the network-instance The content of this table is used by the router to proxy the reports towards the Querier, when the Querier is attached to a sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups</a>
<b>Tree</b>	<a href="#">proxy-membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i> <b>filter-mode</b> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i> <b>source</b> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i> <b>source</b> <a href="#">source</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time string**

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping proxy-membership-groups group group string source source string up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time string**

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping proxy-membership-groups group group string up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**querier**

<b>Description</b>	Enter the querier context
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping querier</a>
<b>Tree</b>	<a href="#">querier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address string**

<b>Description</b>	The source IP address used by queries sent out by this multicast router
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping querier address string</a>
<b>Tree</b>	<a href="#">address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### expiry-time *number*

<b>Description</b>	The time remaining before this multicast router is aged out
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### igmp-v3-states

<b>Description</b>	Enter the igmp-v3-states context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier igmp-v3-states</a>
<b>Tree</b>	<a href="#">igmp-v3-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### general-query-interval *number*

<b>Description</b>	The General Query Interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier igmp-v3-states general-query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-query-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-response-interval** *number*

<b>Description</b>	The General Query Response interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier igmp-v3-states general-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-response-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	The Robust Count value used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier igmp-v3-states robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface** *string*

<b>Description</b>	Interface behind which this multicast router is located
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier interface</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time since this multicast router has been known in this service
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version number**

<b>Description</b>	The version of the protocol that is sent by this multicast router
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping querier version number</a>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 3
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-interval number**

<b>Description</b>	Interval at which the router sends the IGMP membership queries
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping query-interval number</a>
<b>Tree</b>	<a href="#">query-interval</a>
<b>Range</b>	1 to 65535
<b>Default</b>	125
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-source-address string**

<b>Description</b>	Source IP address used when generating IGMP queries
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping query-source-address string</a>
<b>Tree</b>	<a href="#">query-source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**report-source-address** *string*

<b>Description</b>	Source IP address used when generating IGMP reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping report-source-address</a> <i>string</i>
<b>Tree</b>	<a href="#">report-source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	Configures the IGMP robustness to allow for the expected IGMP packet loss  The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	1 to 255
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**trace-options**

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**trace**

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping trace-options trace</a>

<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## packet

<b>Description</b>	Trace IGMP Packet types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping trace-options trace packet</a>
<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## interface [interface-name](#) *string*

<b>Description</b>	List of interfaces to trace
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping trace-options trace packet interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	8

## interface-name *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping trace-options trace packet interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**modifier** *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">igmp-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>dropped Enable tracing for the packets which are dropped</li> <li>ingress-and-dropped Enable tracing for the packets which are sent or received</li> <li>egress-ingress-and-dropped Enable tracing for the packets which are sent, received or dropped</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-mac** [source-mac](#) *string*

<b>Description</b>	List of source mac addresses to trace
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">igmp-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet source-mac</a> <a href="#">source-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">source-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	8

**source-mac** *string*

<b>Description</b>	Enter the source-mac context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">igmp-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet source-mac</a> <a href="#">source-mac</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**transmitted-bgp-smet-routes** *number*

<b>Description</b>	Transmitted BGP SMET routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping transmitted-bgp-smet-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-bgp-smet-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vxlan-destination** [vtep](#) ([ipv4-address](#) | [ipv6-address](#)) [vni](#) *number*

<b>Description</b>	Enter the vxlan-destination list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i>
<b>Tree</b>	<a href="#">vxlan-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vtep** ([ipv4-address](#) | [ipv6-address](#))

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vni** *number*

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **index number**

**Description** the next-hop-group-id (system allocated) for resolving the VXLAN termination endpoint

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) *index number*

**Tree** [index](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **is-evpn-proxy boolean**

**Description** vxlan-interface supports evpn-proxy

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) *is-evpn-proxy boolean*

**Tree** [is-evpn-proxy](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **is-mrouter-port boolean**

**Description** vxlan-interface is a multicast router port

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) *is-mrouter-port boolean*

**Tree** [is-mrouter-port](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **is-sbd boolean**

**Description** vxlan-interface is a supplementary broadcast domain

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) *is-sbd boolean*

<b>Tree</b>	<a href="#">is-sbd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### membership-group-count *number*

<b>Description</b>	The number of multicast groups which have been learned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-group-count number</a>
<b>Tree</b>	<a href="#">membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### membership-groups

<b>Description</b>	List of IGMP Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	Multicast address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string expiry-time number</a>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string filter-mode keyword</a>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **group-type** *keyword*

**Description** Enter the group-type context

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep \(ipv4-address | ipv6-address\)](#) [vni number](#) [membership-groups group group](#) *string* **group-type** *keyword*

**Tree** [group-type](#)

**Options**

- static  
This group entry was statically configured.
- dynamic  
This group entry was learned by the protocol.
- bgp-smet  
This group entry was learned from a bgp SMET route.
- bgp-sync  
This group entry was learned from a bgp JOIN SYNC route.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **igmp-compatibility-mode** *keyword*

**Description** Compatibility with older version routers

**Context** [network-instance name](#) *string* [protocols igmp-snooping vxlan-destination vtep \(ipv4-address | ipv6-address\)](#) [vni number](#) [membership-groups group group](#) *string* **igmp-compatibility-mode** *keyword*

**Tree** [igmp-compatibility-mode](#)

**Options**

- 1
- 2
- 3

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *source string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string</a> <a href="#">source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string</a> <a href="#">source source string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string</a> <a href="#">source source string expiry-time number</a>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**forwarding-state** *keyword*

<b>Description</b>	Traffic forwarding state on this port
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string</a> <a href="#">source source string forwarding-state keyword</a>

<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• block</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source-type *keyword*

<b>Description</b>	Enter the source-type context
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string source source string source-type keyword</a>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static This group entry was statically configured.</li> <li>• dynamic This group entry was learned by the protocol.</li> <li>• bgp-smet This group entry was learned from a bgp SMET route.</li> <li>• bgp-sync This group entry was learned from a bgp JOIN SYNC route.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### up-time *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string source source string up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string</a> <a href="#">up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 1 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string</a> <a href="#">v1-host-timer number</a>
<b>Tree</b>	<a href="#">v1-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v2-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 2 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string</a> <a href="#">v2-host-timer number</a>
<b>Tree</b>	<a href="#">v2-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



## statistics

<b>Description</b>	vxlan-interface statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## discarded-smet *number*

<b>Description</b>	Total number of discarded smet routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics discarded-smet number</a>
<b>Tree</b>	<a href="#">discarded-smet</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## received-smet *number*

<b>Description</b>	Total number of received smet routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics received-smet number</a>
<b>Tree</b>	<a href="#">received-smet</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## isis

<b>Description</b>	Top-level configuration and operational state for Intermediate System to Intermediate System (ISIS)
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> protocols isis
<b>Tree</b>	<a href="#">isis</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **dynamic-label-block** *reference*

<b>Description</b>	Reference to a dynamic label block  Configuration of this label block is mandatory in order to enable segment routing MPLS (SR-MPLS) in IS-IS. Dynamic adjacency SID labels come from this label block.  This label block is not advertised as an SRLB in the router capabilities TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> protocols isis <a href="#">dynamic-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">dynamic-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges</a> <i>dynamic name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dynamic-label-block-status** *keyword*

<b>Description</b>	Status of the label block.  The label block may show as unavailable if there is pending cleanup.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> protocols isis <a href="#">dynamic-label-block-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">dynamic-label-block-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• available</li> <li>• unavailable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **instance** [name](#) *string*

<b>Description</b>	List of IS-IS protocol instances associated with this network-instance. Only a single instance is supported for now
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> protocols isis <a href="#">instance name</a> <i>string</i>

<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	The name of the IS-IS instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Used to administratively enable or disable the IS-IS instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**attached-bit**

<b>Description</b>	This container provides option for handling the ATTached bit in L1 LSPs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">attached-bit</a>
<b>Tree</b>	<a href="#">attached-bit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ignore** *boolean*

<b>Description</b>	When set to true, if the attached bit is set on an incoming Level 1 LSP, the local system ignores it. In this case the local system does not set a default route to the L1L2 router advertising the PDU with the attached bit set.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">attached-bit ignore</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ignore</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**suppress** *boolean*

<b>Description</b>	When set to true, if the local IS acts as a L1L2 router, then the attached bit is not advertised in locally generated L1 LSPs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">attached-bit suppress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suppress</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container for specifying authentication options that apply to the entire IS-IS instance or to an entire level.  The settings in this container only apply to PDUs without an authentication behavior specified at a more granular level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**csnp-authentication**

<b>Description</b>	Container with options to control the authentication of CSNP PDUs
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication csnp-authentication</a>
<b>Tree</b>	<a href="#">csnp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**check-received** *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication csnp-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>strict</b> Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>• <b>loose</b> Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>• <b>disable</b> This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication csnp-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## hello-authentication

<b>Description</b>	Container with options to control the authentication of Hello PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication hello-authentication</a>
<b>Tree</b>	<a href="#">hello-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## check-received *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication hello-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>loose Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>disable This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## generate *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication hello-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## key

**Description** Container to specify the secret key and crypto algorithm to use for the authentication of PDUs when the behavior is controlled at this level of the configuration hierarchy

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string*  
[authentication key](#)

**Tree** [key](#)

**Configurable** True

**Platforms** Supported on all platforms

## auth-password *string*

**Description** The secret key to use for authentication of PDUs

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string*  
[authentication key auth-password](#) *string*

**Tree** [auth-password](#)

**Configurable** True

**Platforms** Supported on all platforms

## crypto-algorithm *keyword*

**Description** The cryptographic algorithm used with the keying material to secure the messages.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string*  
[authentication key crypto-algorithm](#) *keyword*

**Tree** [crypto-algorithm](#)

### Options

- cleartext

The authentication-key is encoded in plaintext.

- hmac-md5

The authentication-key is used to generate a 16-byte (128 bit) MD5 digest using the HMAC algorithm (RFC 2104).

- hmac-sha-256

The authentication-key is used to generate a SHA2 digest using the HMAC algorithm (RFC 2104).The SHA-256 variant of SHA2 produces an output of 32 bytes (256 bits).

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### keychain *reference*

<b>Description</b>	Specifies a keychain to use for the authentication of PDUs when the behavior is controlled at this level of the configuration hierarchy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication keychain</a> <i>reference</i>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isp-authentication

<b>Description</b>	Container with options to control the authentication of Link State PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication Isp-authentication</a>
<b>Tree</b>	<a href="#">Isp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### check-received *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication Isp-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• strict           <p>Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</p> </li> <li>• loose           <p>Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</p> </li> <li>• disable</li> </ul>



This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication lsp-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **psnp-authentication**

<b>Description</b>	Container with options to control the authentication of PSNP PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication psnp-authentication</a>
<b>Tree</b>	<a href="#">psnp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **check-received** *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication psnp-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>loose</li> </ul>

Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.

- `disable`

This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">authentication psnp-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **auto-cost**

<b>Description</b>	Enter the auto-cost context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">auto-cost</a>
<b>Tree</b>	<a href="#">auto-cost</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **reference-bandwidth** *number*

<b>Description</b>	<p>Configures the reference bandwidth that provides the basis for interface metrics based on link bandwidth.</p> <p>If the reference bandwidth is defined, then the cost is calculated using the following formula: <math>\text{cost} = \text{reference-bandwidth} / \text{bandwidth}</math></p> <p>When a large reference-bandwidth value is configured, a metric calculation may result in a value higher than the supported protocol cost value. If this occurs, IS-IS automatically reverts to the maximum configurable cost metric.</p> <p>If the reference bandwidth is not configured then all interfaces have a default metric of 10.</p>
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Note: To use metrics in excess of 63, wide metrics must be deployed

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">auto-cost reference-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-bandwidth</a>
<b>Range</b>	1 to 8000000000
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **enable-csnp-on-p2p-links** *boolean*

<b>Description</b>	Enable/disable the transmission of periodic CSNP PDUs on point-to-point interfaces  When this is set to false, CSNP PDUs will only be sent on a P2P interface when the adjacency is initialized. This setting has no effect on broadcast interfaces.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">enable-csnp-on-p2p-links</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-csnp-on-p2p-links</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to redistribute non-ISIS routes into ISIS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **graceful-restart**

<b>Description</b>	Container for options related to IS-IS graceful restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">graceful-restart</a>

<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **acceptable-duration** *number*

<b>Description</b>	Initial value of the Remaining Time that is advertised in the Restart TLV with Restart Acknowledgement flag set when this router starts to help another router that has just (re)entered Restart mode.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">graceful-restart acceptable-duration</a> <i>number</i>
<b>Tree</b>	<a href="#">acceptable-duration</a>
<b>Range</b>	1 to 20000
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **helper-mode** *boolean*

<b>Description</b>	Enable or disable the IS-IS graceful restart helper function When this leaf is set, the local system supports retaining forwarding information during a neighbor router's restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">graceful-restart helper-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">helper-mode</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **hello-padding** *keyword*

<b>Description</b>	Specifies the use of IS-IS Hello PDU padding all interfaces This can be overridden by interface configuration.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">hello-padding</a> <i>keyword</i>
<b>Tree</b>	<a href="#">hello-padding</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict padding option. Hello padding is done continuously, regardless of adjacency state or interface type.</li> <li>loose Loose padding option. On p2p interfaces hello PDUs are padded from the initial detection of a new neighbor until the adjacency transitions to the INIT state. On broadcast interfaces hello padding is done until there is at least one UP adjacency on the interface.</li> <li>adaptive Adaptive padding option. On p2p interfaces hello PDUs are padded until the sender declares the adjacency to be UP (based on 3-way handshake or the classic algorithm described in ISO 10589. If the p2p neighbor does not support the adjacency state TLV, then padding continues. On broadcast interfaces hello padding is done until there is at least one UP adjacency on the interface.</li> <li>disable This enum disables hello PDU padding</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## hostnames

<b>Description</b>	Enter the hostnames context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">hostnames</a>
<b>Tree</b>	<a href="#">hostnames</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## system-id [host-system-id](#) *string*

<b>Description</b>	List of system IDs that have discovered hostnames.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">hostnames</a> <a href="#">system-id host-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">system-id</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### host-system-id *string*

**Description** The system ID

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [hostnames system-id host-system-id \*string\*](#)

**String Length** 14

**Configurable** False

**Platforms** Supported on all platforms

### hostname *string*

**Description** The hostname of the system.

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [hostnames system-id host-system-id \*string\*](#) [hostname \*string\*](#)

**Tree** [hostname](#)

**Configurable** False

**Platforms** Supported on all platforms

### iid-tlv *boolean*

**Description** ISIS Instance Identifier TLV. When set to true, IID-TLV identifies the unique instance as well as the topology/topologies to which the PDU applies.

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [iid-tlv \*boolean\*](#)

**Tree** [iid-tlv](#)

**Default** false

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### instance-id *number*

**Description** ISIS instance number

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">instance-id number</a>
<b>Tree</b>	<a href="#">instance-id</a>
<b>Range</b>	0 to 127
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### inter-level-propagation-policies

<b>Description</b>	Container with options to control the propagation of prefixes between levels
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">inter-level-propagation-policies</a>
<b>Tree</b>	<a href="#">inter-level-propagation-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### level1-to-level2

<b>Description</b>	Container with options to control the propagation of prefixes from level 1 to level 2. By default all L1 prefixes are propagated without summarization into L2.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">inter-level-propagation-policies level1-to-level2</a>
<b>Tree</b>	<a href="#">level1-to-level2</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### summary-address [ip-prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	List of summarization prefixes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">inter-level-propagation-policies level1-to-level2 summary-address ip-prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
<b>Tree</b>	<a href="#">summary-address</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	An IP prefix advertised into L2 that summarizes one or more L1 prefixes and causes them to be suppressed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">inter-level-propagation-policies level1-to-level2 summary-address ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **route-tag** *number*

<b>Description</b>	Specifies route tag value to assign to the summary route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">inter-level-propagation-policies level1-to-level2 summary-address ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-tag</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **interface** [interface-name](#) *string*

<b>Description</b>	List of IS-IS interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **interface-name** *string*

<b>Description</b>	Name of the IS-IS interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i>



<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **adjacency** *neighbor-system-id string adjacency-level string*

<b>Description</b>	List of adjacencies formed through this interface.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">interface interface-name string</a> <a href="#">adjacency neighbor-system-id string</a> <a href="#">adjacency-level string</a>
<b>Tree</b>	<a href="#">adjacency</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-system-id** *string*

<b>Description</b>	The neighbor router's system ID.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">interface interface-name string</a> <a href="#">adjacency neighbor-system-id string</a> <a href="#">adjacency-level string</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **adjacency-level** *string*

<b>Description</b>	The level of the adjacency that is formed.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">interface interface-name string</a> <a href="#">adjacency neighbor-system-id string</a> <a href="#">adjacency-level string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **area-address** *string*

<b>Description</b>	Area address of the neighbor.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">area-address</a> <i>string</i>
<b>Tree</b>	<a href="#">area-address</a>
<b>String Length</b>	2 to 38
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **designated-is-system-id** *string*

<b>Description</b>	System id of the designated IS router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">designated-is-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">designated-is-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **down-reason** *keyword*

<b>Description</b>	The reason why the adjacency is down.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 3-way-handshake-failed</li> <li>• address-mismatch</li> <li>• hold-timer-expired</li> <li>• area-mismatch</li> <li>• bad-hello</li> <li>• bfd-session-down</li> <li>• interface-down</li> <li>• interface-level-disabled</li> <li>• level-changed</li> <li>• level-mismatch</li> <li>• mt-topology-changed</li> <li>• mt-topology-mismatch</li> </ul>

- remote-system-id-changed
- isis-protocol-disabled
- unknown

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-up-down-transition *string*

<b>Description</b>	The last time when the adjacency entered the up or down state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">last-up-down-transition</a> <i>string</i>
<b>Tree</b>	<a href="#">last-up-down-transition</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### local-extended-circuit-id *number*

<b>Description</b>	Local extended circuit ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">local-extended-circuit-id</a> <i>number</i>
<b>Tree</b>	<a href="#">local-extended-circuit-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### neighbor-circuit-type *keyword*

<b>Description</b>	The circuit type signalled by the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-circuit-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-circuit-type</a>
<b>Default</b>	L1L2
<b>Options</b>	<ul style="list-style-type: none"> <li>• L1 This enum describes ISIS level 1</li> <li>• L2</li> </ul>

This enum describes ISIS level 2

- L1L2

This enum describes ISIS level 1-2

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-extended-circuit-id** *number*

<b>Description</b>	Extended circuit ID assigned by the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-extended-circuit-id</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-extended-circuit-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-hostname** *string*

<b>Description</b>	The hostname of the neighbor, as learned by TLV 137.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-hostname</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-hostname</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-ipv4** *string*

<b>Description</b>	The IPv4 address of the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-ipv4</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-ipv4</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-ipv6** *string*

<b>Description</b>	The IPv6 address of the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-ipv6</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-ipv6</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-last-restart** (*keyword* | *date-and-time-delta*)

<b>Description</b>	The last time the neighbor restarted under protection of graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-last-restart</a> ( <i>keyword</i>   <i>date-and-time-delta</i> )
<b>Tree</b>	<a href="#">neighbor-last-restart</a>
<b>String Length</b>	20 to 32
<b>Options</b>	<ul style="list-style-type: none"> <li>• never</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-priority** *number*

<b>Description</b>	The priority signalled by the neighbor to become the DIS on a LAN
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-priority</a>
<b>Range</b>	0 to 127
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-restart-capable** *boolean*

<b>Description</b>	Reads true when the neighbor has signalled that it is restart capable.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-restart-capable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">neighbor-restart-capable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-restart-status** *keyword*

<b>Description</b>	The status of the neighbor with respect to graceful restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-restart-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-restart-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-helping</li> <li>• helping</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-restarts** *number*

<b>Description</b>	The number of times the neighbor has restarted under protection of graceful restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-restarts</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-restarts</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **neighbor-snpa** *string*

<b>Description</b>	The SNPA of the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">neighbor-snpa</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-snpa</a>
<b>String Length</b>	0 to 20

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**nlpid** *keyword*

<b>Description</b>	List of protocols supported by the adjacency.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">nlpid</a> <i>keyword</i>
<b>Tree</b>	<a href="#">nlpid</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPv4 NLPID 0xCC corresponding to IPv4</li> <li>• IPv6 NLPID 0x8E corresponding to IPv6</li> <li>• CLNS NLPID 0x81 corresponding to CLNS</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**remaining-holdtime** *number*

<b>Description</b>	The time remaining until the hold timer will expire.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">remaining-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining-holdtime</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**state** *keyword*

<b>Description</b>	The current state of the adjacency.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• up This state describes that adjacency is established.</li> <li>• down This state describes that adjacency is NOT established.</li> <li>• init This state describes that adjacency is establishing.</li> <li>• failed This state describes that adjacency is failed.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **up-down-transitions** *number*

<b>Description</b>	The total number of transitions from Up state to a lower state, since the last clear.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacency neighbor-system-id</a> <i>string</i> <a href="#">adjacency-level</a> <i>string</i> <a href="#">up-down-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">up-down-transitions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Used to administratively enable or disable the IS-IS protocol on a routed subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## authentication

<b>Description</b>	Container for specifying authentication options that apply to the IS-IS instance.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## hello-authentication

<b>Description</b>	Container with options to control the authentication of Hello PDUs
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string authentication hello-authentication</a>
<b>Tree</b>	<a href="#">hello-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## check-received *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string authentication hello-authentication check-received keyword</a>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>loose Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>disable This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">authentication hello-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**key**

<b>Description</b>	Container to specify the secret key and crypto algorithm to use for the authentication of Hello PDUs on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">authentication key</a>
<b>Tree</b>	<a href="#">key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**auth-password** *string*

<b>Description</b>	The secret key to use for authentication of Hello PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">authentication key auth-password</a> <i>string</i>
<b>Tree</b>	<a href="#">auth-password</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**crypto-algorithm** *keyword*

<b>Description</b>	The cryptographic algorithm used with the keying material to secure the messages.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">authentication key crypto-algorithm</a> <i>keyword</i>

<b>Tree</b>	<a href="#">crypto-algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>cleartext</b> The authentication-key is encoded in plaintext.</li> <li>• <b>hmac-md5</b> The authentication-key is used to generate a 16-byte (128 bit) MD5 digest using the HMAC algorithm (RFC 2104).</li> <li>• <b>hmac-sha-256</b> The authentication-key is used to generate a SHA2 digest using the HMAC algorithm (RFC 2104).The SHA-256 variant of SHA2 produces an output of 32 bytes (256 bits).</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### keychain *reference*

<b>Description</b>	Specifies a keychain to use for the authentication of Hello PDUs on this interface.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string authentication keychain reference</a>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### circuit-id *number*

<b>Description</b>	The circuit ID assigned by this IS-IS router to its interface.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string circuit-id number</a>
<b>Tree</b>	<a href="#">circuit-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### circuit-type *keyword*

<b>Description</b>	Specifies the circuit type as either point-to-point or broadcast
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string circuit-type keyword</a>

<b>Tree</b>	<a href="#">circuit-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>point-to-point This enum describes a point-to-point interface</li> <li>broadcast This enum describes a broadcast interface</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## delay

<b>Description</b>	Enter the delay context
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string delay</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delay-selection *keyword*

<b>Description</b>	Delay source advertised by IGP for the interface
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string delay delay-selection keyword</a>
<b>Tree</b>	<a href="#">delay-selection</a>
<b>Default</b>	static-preferred
<b>Options</b>	<ul style="list-style-type: none"> <li>static</li> <li>dynamic</li> <li>static-preferred</li> <li>dynamic-preferred</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## unidirectional-minimum-link-delay *number*

<b>Description</b>	Operational Unidirectional link delay advertised by ISIS
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">delay unidirectional-minimum-link-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">unidirectional-minimum-link-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-padding *keyword*

<b>Description</b>	Specifies the use of IS-IS Hello PDU padding on the interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">hello-padding</a> <i>keyword</i>
<b>Tree</b>	<a href="#">hello-padding</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict padding option. Hello padding is done continuously, regardless of adjacency state or interface type.</li> <li>loose Loose padding option. On p2p interfaces hello PDUs are padded from the initial detection of a new neighbor until the adjacency transitions to the INIT state. On broadcast interfaces hello padding is done until there is at least one UP adjacency on the interface.</li> <li>adaptive Adaptive padding option. On p2p interfaces hello PDUs are padded until the sender declares the adjacency to be UP (based on 3-way handshake or the classic algorithm described in ISO 10589. If the p2p neighbor does not support the adjacency state TLV, then padding continues. On broadcast interfaces hello padding is done until there is at least one UP adjacency on the interface.</li> <li>disable This enum disables hello PDU padding</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## interface-ref

<b>Description</b>	Reference to a subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">interface-ref</a>

<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface *reference*

<b>Description</b>	Reference to a base interface, for example a port or LAG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">interface-ref interface</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *reference*

<b>Description</b>	Reference to a subinterface This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">interface-ref subinterface</a> <i>reference</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-unicast

<b>Description</b>	Enter the ipv4-unicast context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	When set to true, the interface and level supports IPv4 unicast routing
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ipv4-unicast admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**enable-bfd** *boolean*

<b>Description</b>	Enable BFD for IPv4
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ipv4-unicast enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**include-bfd-tlv** *boolean*

<b>Description</b>	Specifies whether a BFD-enabled TLV is included for IPv4 on this IS-IS interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ipv4-unicast include-bfd-tlv</a> <i>boolean</i>
<b>Tree</b>	<a href="#">include-bfd-tlv</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-unicast

**Description** Enter the ipv6-unicast context

**Context** [network-instance name string protocols isis instance name string interface interface-name string ipv6-unicast](#)

**Tree** [ipv6-unicast](#)

**Configurable** True

**Platforms** Supported on all platforms

## admin-state *keyword*

**Description** When set to true, the interface and level supports IPv6 unicast routing

**Context** [network-instance name string protocols isis instance name string interface interface-name string ipv6-unicast admin-state keyword](#)

**Tree** [admin-state](#)

**Default** enable

**Options**

- enable
- disable

**Configurable** True

**Platforms** Supported on all platforms

## enable-bfd *boolean*

**Description** Enable BFD for IPv6

**Context** [network-instance name string protocols isis instance name string interface interface-name string ipv6-unicast enable-bfd boolean](#)

**Tree** [enable-bfd](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**include-bfd-tlv** *boolean*

<b>Description</b>	Specifies whether a BFD-enabled TLV is included for IPv6 on this IS-IS interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ipv6-unicast include-bfd-tlv</a> <i>boolean</i>
<b>Tree</b>	<a href="#">include-bfd-tlv</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ldp-synchronization**

<b>Description</b>	Container with configuration options and state that pertains to the operation of LDP-IGP synchronization on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**disable**

<b>Description</b>	Disable LDP-IGP synchronization procedures on this interface, even if synchronization is enabled globally
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration** *number*

<b>Description</b>	The length of time that the IGP interface has been in sync or out of sync
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization duration</a> <i>number</i>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-of-lib** *boolean*

<b>Description</b>	<p>When set to true, the IGP restores the normal metric for the IGP adjacency when learning from LDP that all label-FEC mappings have been received from the LDP peer, even if there is remaining time on the hold-down-timer.</p> <p>When set to false, the IGP always waits for the full duration of the hold-down-timer to restore the normal metric for the IGP adjacency.</p> <p>This overrides the global/instance level setting</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization end-of-lib</a> <i>boolean</i>
<b>Tree</b>	<a href="#">end-of-lib</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hold-down-timer** *number*

<b>Description</b>	<p>The maximum amount of time that the IGP advertises a maximum metric for an interface, measured from the time that the LDP adjacency is re-established after going down.</p> <p>This overrides the global/instance level setting</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization hold-down-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Range</b>	1 to 1800
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-state** *keyword*

<b>Description</b>	The current state of the interface with respect to LDP-IGP sync
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization sync-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">sync-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>wait-for-LDP-adjacency</b> The IGP is waiting for the LDP adjacency to come up. The interface is being advertised with max-metric</li> <li>• <b>hold-down-timer-active</b> The LDP adjacency has come up and the IGP has started the hold-down-timer, waiting for either end-of-lib or hold-down-timer expiry. The interface is being advertised with max-metric</li> <li>• <b>end-of-lib-received</b> The IGP received end-of-lib and has switched to normal operation. The interface is being advertised with a normal metric</li> <li>• <b>hold-down-timer-expired</b> The IGP did not receive end-of-lib (or was configured to ignore it) but hold-down-timer has expired and normal metric is restored</li> <li>• <b>manual-exit</b> A tools command was performed to exit ldp-sync. Normal operation is resumed, max-metric is removed</li> <li>• <b>disabled</b> ldp-sync is not applicable on this interface</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**level** *level-number number*

<b>Description</b>	List of IS-IS levels supported by this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i>
<b>Tree</b>	<a href="#">level</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	2

**level-number** *number*

<b>Description</b>	Specifies the IS-IS protocol level to which these attributes are applied.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i>
<b>Range</b>	1 to 2
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container for specifying authentication options that apply to the IS-IS instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**hello-authentication**

<b>Description</b>	Container with options to control the authentication of Hello PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication hello-authentication</a>
<b>Tree</b>	<a href="#">hello-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**check-received** *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication hello-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict</li> </ul>

Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.

- loose

Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.

- disable

This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### generate *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication hello-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### key

<b>Description</b>	Container to specify the secret key and crypto algorithm to use for the authentication of Hello PDUs on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication key</a>
<b>Tree</b>	<a href="#">key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### auth-password *string*

<b>Description</b>	The secret key to use for authentication of Hello PDUs
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication key auth-password</a> <i>string</i>
<b>Tree</b>	<a href="#">auth-password</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **crypto-algorithm** *keyword*

<b>Description</b>	The cryptographic algorithm used with the keying material to secure the messages.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication key crypto-algorithm</a> <i>keyword</i>
<b>Tree</b>	<a href="#">crypto-algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">cleartext</a> The authentication-key is encoded in plaintext.</li> <li>• <a href="#">hmac-md5</a> The authentication-key is used to generate a 16-byte (128 bit) MD5 digest using the HMAC algorithm (RFC 2104).</li> <li>• <a href="#">hmac-sha-256</a> The authentication-key is used to generate a SHA2 digest using the HMAC algorithm (RFC 2104).The SHA-256 variant of SHA2 produces an output of 32 bytes (256 bits).</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **keychain** *reference*

<b>Description</b>	Specifies a keychain to use for the authentication of Hello PDUs on this interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication keychain reference</a>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**disable** *boolean*

<b>Description</b>	Disable the Level for the interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>disable</b> <i>boolean</i>
<b>Tree</b>	<a href="#">disable</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-unicast-metric** *number*

<b>Description</b>	Specifies the interface metric associated with the IPv6-unicast multi-topology. The default is based on reference-bandwidth, or else if this is not configured the default is 10.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>ipv6-unicast-metric</b> <i>number</i>
<b>Tree</b>	<a href="#">ipv6-unicast-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**metric** *number*

<b>Description</b>	Specifies the interface metric associated with the native routing topology. The default is based on reference-bandwidth, or else if this is not configured the default is 10.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>metric</b> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**passive** *boolean*

<b>Description</b>	When set to true the interface is configured as a passive interface for this level and does not send IIH PDUs or try to form an adjacency with other routers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>passive</b> <i>boolean</i>
<b>Tree</b>	<a href="#">passive</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority** *number*

<b>Description</b>	ISIS neighbor priority for becoming Designated IS (LAN hello PDU only).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>priority</b> <i>number</i>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	0 to 127
<b>Default</b>	64
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Interface per level statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <b>statistics</b>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pdu** [pdu-name](#) *keyword*

<b>Description</b>	List of PDUs processed by the IS-IS instance since the IS-IS manager restarted
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pdu</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pdu-name** *keyword*

<b>Description</b>	The PDU type that was processed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• LSP Link State PDU</li> <li>• IIH IS-to-IS Hello PDU</li> <li>• CSNP Complete Sequence Number PDU</li> <li>• PSNP Partial Sequence Number PDU</li> <li>• Unknown Unknown PDU type</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**dropped** *number*

<b>Description</b>	The number of PDUs that were received and dropped
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name</a> <i>keyword</i> <a href="#">dropped</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**processed** *number*

<b>Description</b>	The number of PDUs that were received and processed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name keyword</a> <a href="#">processed</a> <i>number</i>
<b>Tree</b>	<a href="#">processed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**received** *number*

<b>Description</b>	The number of PDUs that were received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name keyword</a> <a href="#">received</a> <i>number</i>
<b>Tree</b>	<a href="#">received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**sent** *number*

<b>Description</b>	The number of PDUs that were transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics pdu pdu-name keyword</a> <a href="#">sent</a> <i>number</i>
<b>Tree</b>	<a href="#">sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**timers**

<b>Description</b>	Enter the timers context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">timers</a>

<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### hello-interval *number*

<b>Description</b>	ISIS hello-interval value. The default is 3 seconds on Designated IS interfaces and 9 seconds for non-DIS and p2p interfaces
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string level level-number number timers hello-interval number</a>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	1 to 20000
<b>Default</b>	9
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### hello-multiplier *number*

<b>Description</b>	<p>ISIS hello-multiplier value.</p> <p>The neighbor hold time is (hello multiplier x hello interval) on non-designated intermediate system broadcast interfaces and point-to-point interfaces and (hello multiplier x hello interval / 3) on designated intermediate system broadcast interfaces.</p> <p>The hold time is the time in which the neighbor expects to receive the next Hello PDU. If the neighbor receives a Hello within this time, the hold time is reset. If the neighbor does not receive a Hello within the hold time, it brings the adjacency down.</p>
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string level level-number number timers hello-multiplier number</a>
<b>Tree</b>	<a href="#">hello-multiplier</a>
<b>Range</b>	2 to 100
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**loopfree-alternate-exclude** *boolean*

<b>Description</b>	Enable/disable Loopfree Alternative at interface level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <b>loopfree-alternate-exclude</b> <i>boolean</i>
<b>Tree</b>	<a href="#">loopfree-alternate-exclude</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	The operational state of the IS-IS interface. This simply tracks the operational state of the subinterface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power</li> </ul>

- Component is offline due to insufficient system power
- degraded
  - Component or process is in a degraded state
- warm-reboot
  - Component or process is currently warm rebooting
  - This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
  - Component or process is currently waiting
  - This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**passive** *boolean***Description**

When set to true the interface is configured as a passive interface and does not send IIH PDUs or try to form an adjacency with other routers.

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [interface interface-name](#) *string* *passive* *boolean*

**Tree**[passive](#)**Default**

false

**Configurable**

True

**Platforms**

Supported on all platforms

**segment-routing****Description**

Container with interface-specific segment routing options

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [interface interface-name](#) *string* *segment-routing*

**Tree**[segment-routing](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls

<b>Description</b>	SR-MPLS interface options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-adjacency-sid

<b>Description</b>	The IPv4 adjacency SID associated with the interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid</a>
<b>Tree</b>	<a href="#">ipv4-adjacency-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## assignment *keyword*

<b>Description</b>	<p>The method that should be used to allocate an adjacency SID or multiple adjacency SIDs for this interface.</p> <p>This overrides the top level configuration to assign dynamic adjacency SIDs to all interfaces.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid assignment keyword</a>
<b>Tree</b>	<a href="#">assignment</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static           <p>The user will statically configure an adjacency SID for the interface. This option is not available if the interface type is not point-to-point.</p> </li> <li>• dynamic           <p>IS-IS should dynamically allocate one or more dynamic adjacency SIDs for this interface.</p> </li> <li>• none</li> </ul>

No adjacency SIDs should be allocated for this interface.

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### programmed-sids *label-value number*

<b>Description</b>	The list of IPv4 adjacency SIDs that have been programmed in association with this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid programmed-sids label-value</a> <i>number</i>
<b>Tree</b>	<a href="#">programmed-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-value *number*

<b>Description</b>	The adjacency SID represented by the MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid programmed-sids label-value</a> <i>number</i>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adjacency-level *keyword*

<b>Description</b>	The level of the adjacency that is formed. Only populated for dynamic adjacency SIDs on broadcast interfaces.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid programmed-sids label-value</a> <i>number</i> <a href="#">adjacency-level</a> <i>keyword</i>
<b>Tree</b>	<a href="#">adjacency-level</a>
<b>Default</b>	L1L2
<b>Options</b>	<ul style="list-style-type: none"> <li>• L1 This enum describes ISIS level 1</li> <li>• L2 This enum describes ISIS level 2</li> <li>• L1L2 This enum describes ISIS level 1-2</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-system-id *string*

<b>Description</b>	The neighbor router's system ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid programmed-sids label-value</a> <i>number</i> <a href="#">neighbor-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### static *number*

<b>Description</b>	Configure a static adjacency SID represented by an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-adjacency-sid static</a> <i>number</i>
<b>Tree</b>	<a href="#">static</a>
<b>Range</b>	16 to 1048575



<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-node-sid

<b>Description</b>	Configuration of IPv4 node SID.  The (primary) IPv4 address of this interface is advertised as a prefix SID with the node-SID flag set. The associated label is derived from the label index configured in this container.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-node-sid</a>
<b>Tree</b>	<a href="#">ipv4-node-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## index number

<b>Description</b>	Label index to add to SRGB base.  This causes the V-flag and L-flag in the prefix SID subTLV to be set to zero.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv4-node-sid index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Range</b>	0 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-adjacency-sid

<b>Description</b>	The IPv6 adjacency SID associated with the interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-adjacency-sid</a>
<b>Tree</b>	<a href="#">ipv6-adjacency-sid</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### assignment *keyword*

**Description** The method that should be used to allocate an adjacency SID or multiple adjacency SIDs for this interface.  
This overrides the top level configuration to assign dynamic adjacency SIDs to all interfaces.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [interface interface-name](#) *string* [segment-routing mpls ipv6-adjacency-sid assignment](#) *keyword*

**Tree** [assignment](#)

**Options**

- static  
The user will statically configure an adjacency SID for the interface. This option is not available if the interface type is not point-to-point.
- dynamic  
IS-IS should dynamically allocate one or more dynamic adjacency SIDs for this interface.
- none  
No adjacency SIDs should be allocated for this interface.

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### programmed-sids *label-value number*

**Description** The list of IPv4 adjacency SIDs that have been programmed in association with this interface

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [interface interface-name](#) *string* [segment-routing mpls ipv6-adjacency-sid programmed-sids label-value](#) *number*

**Tree** [programmed-sids](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-value *number*

<b>Description</b>	The adjacency SID represented by the MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-adjacency-sid programmed-sids label-value</a> <i>number</i>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adjacency-level *keyword*

<b>Description</b>	The level of the adjacency that is formed. Only populated for dynamic adjacency SIDs on broadcast interfaces.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-adjacency-sid programmed-sids label-value</a> <i>number</i> <a href="#">adjacency-level</a> <i>keyword</i>
<b>Tree</b>	<a href="#">adjacency-level</a>
<b>Default</b>	L1L2
<b>Options</b>	<ul style="list-style-type: none"> <li>• L1 This enum describes ISIS level 1</li> <li>• L2 This enum describes ISIS level 2</li> <li>• L1L2 This enum describes ISIS level 1-2</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-system-id** *string*

<b>Description</b>	The neighbor router's system ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-adjacency-sid programmed-sids label-value</a> <i>number</i> <a href="#">neighbor-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static** *number*

<b>Description</b>	Configure a static adjacency SID represented by an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-adjacency-sid static</a> <i>number</i>
<b>Tree</b>	<a href="#">static</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-node-sid**

<b>Description</b>	Configuration of IPv6 node SID.  The (primary) IPv6 address of this interface is advertised as a prefix SID with the node-SID flag set. The associated label is derived from the label index configured in this container.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">segment-routing mpls ipv6-node-sid</a>
<b>Tree</b>	<a href="#">ipv6-node-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Label index to add to SRGB base. This causes the V-flag and L-flag in the prefix SID subTLV to be set to zero.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string segment-routing mpls ipv6-node-sid index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Range</b>	0 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Statistics associated with this IS-IS interface.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**adjacency-changes number**

<b>Description</b>	Number of times an adjacency state change has occurred on this circuit(summed across all adjacencies).
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string statistics adjacency-changes number</a>
<b>Tree</b>	<a href="#">adjacency-changes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**adjacency-number number**

<b>Description</b>	Number of adjacencies on this circuit.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string statistics adjacency-number number</a>

<b>Tree</b>	<a href="#">adjacency-number</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **area-address-mismatches** *number*

<b>Description</b>	Number of times an IS-IS L1 hello was received on this circuit with a area address field different from that for this system
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics area-address-mismatches</a> <i>number</i>
<b>Tree</b>	<a href="#">area-address-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **authentication-failures** *number*

<b>Description</b>	Number of times an IS-IS control PDU with the correct auth type has failed to pass authentication validation on the interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics authentication-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">authentication-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **authentication-type-failures** *number*

<b>Description</b>	Number of times an IS-IS control PDU with an auth type field different from that for this system has been received on the interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics authentication-type-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">authentication-type-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**designated-is-changes** *number*

<b>Description</b>	Number of times the Designated IS has changed on this circuit.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics designated-is-changes</a> <i>number</i>
<b>Tree</b>	<a href="#">designated-is-changes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-area-address-mismatches** *number*

<b>Description</b>	Number of times an IS-IS control PDU with a max area address field different from that for this system has been received on the interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics max-area-address-mismatches</a> <i>number</i>
<b>Tree</b>	<a href="#">max-area-address-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rejected-adjacencies** *number*

<b>Description</b>	Number of times an adjacency has been rejected on this circuit.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics rejected-adjacencies</a> <i>number</i>
<b>Tree</b>	<a href="#">rejected-adjacencies</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system-id-length-mismatches** *number*

<b>Description</b>	Number of times an IS-IS control PDU with a system ID field length different from that for this system has been received on the interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">statistics system-id-length-mismatches</a> <i>number</i>

<b>Tree</b>	<a href="#">system-id-length-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## timers

<b>Description</b>	Enter the timers context
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string timers</a>
<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## csnp-interval *number*

<b>Description</b>	The interval, specified in seconds, at which periodic CSNP packets should be transmitted by the local IS on this interface.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string timers csnp-interval number</a>
<b>Tree</b>	<a href="#">csnp-interval</a>
<b>Range</b>	1 to 65535
<b>Default</b>	10
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## lsp-pacing-interval *number*

<b>Description</b>	<p>Controls the interval between (bursts of) LSPs sent from the interface. The interval applies to all LSPs: LSPs generated by the router, and LSPs received from other routers and re-flooded.</p> <p>The burst interval is 100 ms if the lsp-pacing-interval &lt; 100 ms and otherwise it is 1 second. For example, if the lsp-pacing-interval is 2 ms, at most 50 LSPs are sent every 100 ms. On the other hand, if the lsp-pacing-interval is 100 ms, at most 10 LSPs are sent every 1 second.</p> <p>If a value of 0 is configured, no LSPs are sent from the interface.</p>
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The default pacing interval of 100 milliseconds means that a maximum of 10 LSPs are sent in a burst every second.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">timers lsp-pacing-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">lsp-pacing-interval</a>
<b>Range</b>	0 to 100000
<b>Default</b>	100
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace-options

<b>Description</b>	Interface level debug trace options for IS-IS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace *keyword*

<b>Description</b>	List of tracing options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">trace-options</a> <a href="#">trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">adjacencies</a></li> <li>• <a href="#">packets-all</a></li> <li>• <a href="#">packets-p2p-hello</a></li> <li>• <a href="#">packets-l1-hello</a></li> <li>• <a href="#">packets-l2-hello</a></li> <li>• <a href="#">packets-l1-psnp</a></li> <li>• <a href="#">packets-l2-psnp</a></li> <li>• <a href="#">packets-l1-csnp</a></li> <li>• <a href="#">packets-l2-csnp</a></li> <li>• <a href="#">packets-l1-lsp</a></li> <li>• <a href="#">packets-l2-lsp</a></li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### weighted-ecmp

<b>Description</b>	Enter the weighted-ecmp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">weighted-ecmp</a>
<b>Tree</b>	<a href="#">weighted-ecmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### load-balancing-weight (*number* | *keyword*)

<b>Description</b>	The load-balancing weight of the interface, which applies when weighted ECMP is enabled and the interface is part of a multipath set.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">weighted-ecmp load-balancing-weight</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">load-balancing-weight</a>
<b>Range</b>	1 to 4294967295
<b>Default</b>	auto
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto Load-balancing weight is based on the bandwidth of the parent interface (port or LAG)</li> <li>• none The interface should not participate in weighted ECMP</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### ipv4-unicast

<b>Description</b>	Enables/disables IPv4 routing in this ISIS instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	When set to true, the IS-IS instance supports IPv4 unicast routing
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string ipv4-unicast admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **ipv6-unicast**

<b>Description</b>	Enables/disables IPv6 routing in this ISIS instance.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	When set to true, the IS-IS instance supports IPv6 unicast routing
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string ipv6-unicast admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**multi-topology** *boolean*

<b>Description</b>	When set to true, IS-IS multi-topology TLVs are used for IPv6 routing and support for native IPv6 TLVs is disabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ipv6-unicast multi-topology</a> <i>boolean</i>
<b>Tree</b>	<a href="#">multi-topology</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ldp-synchronization**

<b>Description</b>	Enable LDP-IGP synchronization procedures on all P2P interfaces and all LAN interfaces with a single adjacency, except on interfaces where the functionality is explicitly disabled
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-of-lib** *boolean*

<b>Description</b>	When set to true, the IGP restores the normal metric for the IGP adjacency when learning from LDP that all label-FEC mappings have been received from the LDP peer, even if there is remaining time on the hold-down-timer. When set to false, the IGP always waits for the full duration of the hold-down-timer to restore the normal metric for the IGP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ldp-synchronization end-of-lib</a> <i>boolean</i>
<b>Tree</b>	<a href="#">end-of-lib</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hold-down-timer** *number*

<b>Description</b>	The maximum amount of time that the IGP advertises a maximum metric for an interface, measured from the time that the LDP adjacency is re-established after going down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ldp-synchronization hold-down-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Range</b>	1 to 1800
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**level** [level-number](#) *number*

<b>Description</b>	List of IS-IS levels supported by this IS (router)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i>
<b>Tree</b>	<a href="#">level</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	2

**level-number** *number*

<b>Description</b>	Specifies the IS-IS protocol level to which these attributes are applied.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i>
<b>Range</b>	1 to 2
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container for specifying authentication options that apply to the entire IS-IS instance or to an entire level.
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The settings in this container only apply to PDUs without an authentication behavior specified at a more granular level.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### csnp-authentication

<b>Description</b>	Container with options to control the authentication of CSNP PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication csnp-authentication</a>
<b>Tree</b>	<a href="#">csnp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### check-received *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication csnp-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict           <p>Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</p> </li> <li>loose           <p>Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</p> </li> <li>disable           <p>This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</p> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication csnp-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**hello-authentication**

<b>Description</b>	Container with options to control the authentication of Hello PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication hello-authentication</a>
<b>Tree</b>	<a href="#">hello-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**check-received** *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication hello-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>strict</b> Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>• <b>loose</b> Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>• <b>disable</b> This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **generate** *boolean*

**Description** When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [authentication hello-authentication generate](#) *boolean*

**Tree** [generate](#)

**Configurable** True

**Platforms** Supported on all platforms

### **key**

**Description** Container to specify the secret key and crypto algorithm to use for the authentication of PDUs when the behavior is controlled at this level of the configuration hierarchy

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [authentication key](#)

**Tree** [key](#)

**Configurable** True

**Platforms** Supported on all platforms

### **auth-password** *string*

**Description** The secret key to use for authentication of PDUs

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [authentication key auth-password](#) *string*

**Tree** [auth-password](#)

**Configurable** True

**Platforms** Supported on all platforms

### **crypto-algorithm** *keyword*

**Description** The cryptographic algorithm used with the keying material to secure the messages.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [authentication key crypto-algorithm](#) *keyword*



<b>Tree</b>	<a href="#">crypto-algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>cleartext</b> The authentication-key is encoded in plaintext.</li> <li>• <b>hmac-md5</b> The authentication-key is used to generate a 16-byte (128 bit) MD5 digest using the HMAC algorithm (RFC 2104).</li> <li>• <b>hmac-sha-256</b> The authentication-key is used to generate a SHA2 digest using the HMAC algorithm (RFC 2104).The SHA-256 variant of SHA2 produces an output of 32 bytes (256 bits).</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### keychain *reference*

<b>Description</b>	Specifies a keychain to use for the authentication of PDUs when the behavior is controlled at this level of the configuration hierarchy.
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols isis instance name <i>string</i> level level-number <i>number</i> authentication keychain <i>reference</i></a>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name <i>string</i></a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isp-authentication

<b>Description</b>	Container with options to control the authentication of Link State PDUs
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols isis instance name <i>string</i> level level-number <i>number</i> authentication Isp-authentication</a>
<b>Tree</b>	<a href="#">Isp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### check-received *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication</a> <a href="#">lsp-authentication</a> <a href="#">check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>loose Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>disable This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication</a> <a href="#">lsp-authentication</a> <a href="#">generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **psnp-authentication**

<b>Description</b>	Container with options to control the authentication of PSNP PDUs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication</a> <a href="#">psnp-authentication</a>
<b>Tree</b>	<a href="#">psnp-authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**check-received** *keyword*

<b>Description</b>	Specifies the type of authentication checks done for received PDUs of the specified type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication psnp-authentication check-received</a> <i>keyword</i>
<b>Tree</b>	<a href="#">check-received</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict Strict authentication option. Reject all packets that do not have an authentication TLV or that do have an authentication TLV that cannot be validated.</li> <li>loose Loose authentication option. Accept packets received without an authentication TLV; validate packets received with an authentication TLV and reject those packets that cannot be validated.</li> <li>disable This enum disables authentication checks. Do not check authentication TLV (if any) of received PDUs; authentication TLV may still be added self-generated PDUs</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate** *boolean*

<b>Description</b>	When set to true, IS-IS is instructed to add an authentication TLV to every transmitted PDU of the specified type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">authentication psnp-authentication generate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**link-state-database**

<b>Description</b>	State representation of the ISIS LSDB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database</a>
<b>Tree</b>	<a href="#">link-state-database</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### Isp *lsp-id string*

**Description** List of LSPs in the LSDB.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string](#)

**Tree** [lsp](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### Isp-id *string*

**Description** The value specifies the LSP Id and is given in the format as 6 octets of adjacency system-id followed by 1 octet Lan-ID and 1 octet LSP Number.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string](#)

**String Length** 20

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### checksum *number*

**Description** Checksum of the LSP.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string checksum number](#)

**Tree** [checksum](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	LSP Type-Block flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>flags</b> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>partition-repair</b> When set, the originator supports partition repair.</li> <li>• <b>attached-error</b> When set, the originator is attached to another area using the referred metric.</li> <li>• <b>attached-expense</b> When set, the originator is attached to another area using the referred metric.</li> <li>• <b>attached-delay</b> When set, the originator is attached to another area using the referred metric.</li> <li>• <b>attached-default</b> When set, the originator is attached to another area using the referred metric.</li> <li>• <b>overload</b> When set, the originator is overloaded, and must be avoided in path calculation.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id-length** *number*

<b>Description</b>	Length of the ID field of NSAP addresses and NETs used in this routing domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>id-length</b> <i>number</i>
<b>Tree</b>	<a href="#">id-length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **is-type** *number*

<b>Description</b>	Type of neighboring system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>is-type</b> <i>number</i>
<b>Tree</b>	<a href="#">is-type</a>
<b>Range</b>	1 to 3
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-area-addresses** *number*

<b>Description</b>	Number of area addresses permitted for this ISs area 0 indicates the IS only supports three area addresses (by default). Any number inclusive of 1 and 254 indicates the number of areas allowed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>maximum-area-addresses</b> <i>number</i>
<b>Tree</b>	<a href="#">maximum-area-addresses</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pdu-length** *number*

<b>Description</b>	Total length of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>pdu-length</b> <i>number</i>
<b>Tree</b>	<a href="#">pdu-length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pdu-type** *keyword*

<b>Description</b>	Link State PDU type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>pdu-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">pdu-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>level-1 This enum describes ISIS level 1 PDU.</li> <li>level-2 This enum describes ISIS level 2 PDU.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **remaining-lifetime** *number*

<b>Description</b>	Remaining lifetime in seconds before the LSP expiration.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>remaining-lifetime</b> <i>number</i>
<b>Tree</b>	<a href="#">remaining-lifetime</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-number** *number*

<b>Description</b>	Sequence number of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>sequence-number</b> <i>number</i>

<b>Tree</b>	<a href="#">sequence-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tlvs

<b>Description</b>	This container defines Link State PDU State TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlv</a>
<b>Tree</b>	<a href="#">tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tlv *type identityref*

<b>Description</b>	List of TLV types in the LSDB for the specified LSP.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlv type identityref</a>
<b>Tree</b>	<a href="#">tlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## type *identityref*

<b>Description</b>	The type of TLV being described. The type of TLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlv type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>area-addresses ISIS TLV 1</li> <li>iis-neighbors</li> </ul>



## ISIS TLV 2

- instance-id

## ISIS TLV 7

An Instance Identifier (IID) to uniquely identify an IS-IS instance. When the IID = 0, the list of supported ITIDs MUST NOT be present. An IID-TLV with IID = 0 MUST NOT appear in an SNP or LSP. When the TLV appears (with a non-zero IID) in an SNP or LSP, exactly one ITID. MUST be present indicating the topology with which the PDU is associated. If no ITIDs or multiple ITIDs are present or the IID is zero, then the PDU MUST be ignored

- authentication

## ISIS TLV 10

- purge-oi

## ISIS TLV 13

If an IS generates a purge, it SHOULD include this TLV in the purge with its own system ID. If an IS receives a purge that does not include this TLV, then it SHOULD add this TLV with both its own system ID and the system ID of the IS from which it received the purge. This allows ISs receiving purges to log the system ID of the originator, or the upstream source of the purge.

- lsp-buffer-size

ISIS TLV 14. The maximum MTU that the advertising system can receive, expressed in bytes.

- extended-is-reachability

ISIS TLV 22. An extended IS reachability TLV that has a different data structure to TLV 2 that introduces the use of sub-TLV object-group.

- is-neighbor-attribute

ISIS TLV 23. Identical in format to TLV 22 and included in Original LSPs or Extended LSPs. Regardless of the type of LSP in which the TLVs appear, the information pertains to the neighbor relationship between the Originating System and the IS identified in the TLV

- isis-alias-id

ISIS TLV 24. IS-Alias TLV which extension-capable ISs to recognize the Originating System of an Extended LSP set. It identifies the Normal system-id of the Originating System

- ipv4-internal-reachability

ISIS TLV 128. TLV defines IP addresses within the routing domain reachable directly via one or more interfaces on this Intermediate system

- nlpid

ISIS TLV 129. TLV defines the set Network Layer Protocol Identifiers for Network Layer protocols that this Intermediate System is capable of relaying

- **ipv4-external-reachability**  
ISIS TLV 130. TLV defines IP addresses outside the routing domain reachable via interfaces on this Intermediate system. This is permitted to appear multiple times, and in an LSP with any LSP number. However, this field must not appear in pseudonode LSPs
- **ipv4-interface-addresses**  
ISIS TLV 132. The IP address of one or more interfaces corresponding to the SNPAs enabled on this Intermediate system (i.e., one or more IP addresses of this router). This is permitted to appear multiple times, and in an LSP with any LSP number.
- **ipv4-te-router-id**  
ISIS TLV 134. Traffic Engineering router ID TLV that contains the 4-octet router ID of the router originating the LSP
- **extended-ipv4-reachability**  
ISIS TLV 135. Extended IP reachability TLV that provides for a 32-bit metric and adds one bit to indicate that a prefix has been redistributed \_down\_ in the hierarchy
- **dynamic-name**  
ISIS TLV 137. The Dynamic hostname TLV is optional. This TLV may be present in any fragment of a non-pseudonode LSP. The value field identifies the symbolic name of the router originating the LSP. This symbolic name can be the FQDN for the router, it can be a subset of the FQDN, or it can be any string operators want to use for the router.
- **ipv4-srlg**  
ISIS TLV 138. IPv4 Shared Risk Link Group TLV
- **ipv6-srlg**  
ISIS TLV 139. IPv6 Shared Risk Link Group
- **ipv6-te-router-id**  
ISIS TLV 140. The IPv6 TE Router ID TLV contains a 16-octet IPv6 address. A stable global IPv6 address MUST be used, so that the router ID provides a routable address, regardless of the state of a node's interfaces. If a router does not implement traffic engineering, it MAY include or omit the IPv6 TE Router ID TLV. If a router implements traffic engineering for IPv6, it MUST include this TLV in its LSP. This TLV MUST NOT be included more than once in an LSP.
- **mt-isn**  
ISIS TLV 222. TLV is aligned with extended IS reachability TLV type 22 beside an additional two bytes in front at the beginning of the TLV that indicate MT membership.
- **mt-is-neighbor-attribute**  
ISIS TLV 223. It is identical in format to TLV 222. In the event that there is a need to advertise in Extended LSPs such information associated with

neighbors of the Originating System, it is necessary to define new TLVs to carry the sub-TLV information.

- multi-topology

ISIS TLV 229. This MT TLV can advertise up to 127 MTs. It is announced in IIHs and LSP fragment 0, and can occur multiple times. The resulting MT set SHOULD be the union of all the MT TLV occurrences in the packet. Any other IS-IS PDU occurrence of this TLV MUST be ignored. Lack of MT TLV in hellos and fragment zero LSPs MUST be interpreted as participation of the advertising interface or router in MT ID #0 only. If a router advertises MT TLV, it has to advertise all the MTs it participates in, specifically including topology ID #0 also.

- ipv6-interface-addresses

ISIS TLV 232. IPv6 Interface Address TLV that maps directly to the IP Interface Address TLV in [RFC1195]. We necessarily modify the contents to be 0-15 16-octet IPv6 interface addresses instead of 0-63 4-octet IPv4 interface addresses

- mt-ipv4-reachability

ISIS TLV 235. TLV is aligned with extended IP reachability TLV type 135 beside an additional two bytes in front to indicate MT membership

- ipv6-reachability

ISIS TLV 236. The IPv6 Reachability TLV describes network reachability through the specification of a routing prefix, metric information, a bit to indicate if the prefix is being advertised down from a higher level, a bit to indicate if the prefix is being distributed from another routing protocol, and OPTIONALLY the existence of Sub-TLVs to allow for later extension.

- mt-ipv6-reachability

ISIS TLV 237. TLV is aligned with IPv6 Reachability TLV type 236 beside an additional two bytes in front to indicate MT membership.

- router-capability

ISIS TLV 242. IS-IS TLV named CAPABILITY, formed of multiple sub-TLVs, which allows a router to announce its capabilities within an IS-IS level or the entire routing domain.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**area-address**

**Description**

This container defines TLV 1.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref area-address</a>
<b>Tree</b>	<a href="#">area-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	Area address(es) of the IS. Set of manual area addresses of this IS.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref area-address</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>String Length</b>	2 to 38
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authentication**

<b>Description</b>	This container defines authentication information of the node.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authentication-key** *string*

<b>Description</b>	Authentication key to be used.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref authentication authentication-key</a> <i>string</i>
<b>Tree</b>	<a href="#">authentication-key</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### crypto-type keyword

<b>Description</b>	Enter the crypto-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref authentication crypto-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">crypto-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• cleartext</li> <li>• crypto</li> <li>• hmac-md5</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### extended-ipv4-reachability

<b>Description</b>	This container defines list of IPv4 extended reachability information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability</a>
<b>Tree</b>	<a href="#">extended-ipv4-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefixes

<b>Description</b>	This container describes IS prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes</a>
<b>Tree</b>	<a href="#">prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix [prefix](#) *string*

<b>Description</b>	This list describes IPv4 extended prefixes and attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix *string*

<b>Description</b>	IPv4 prefix contained within extended reachability TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**s-bit boolean**

<b>Description</b>	The Sub-TLV present bit. If UNSET, the octets of Sub-TLVs are not present. Otherwise, the bit is set and the octet following the prefix will contain the length of the Sub-TLV portion of the structure.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">s-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">s-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS prefix sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv** *type identityref*

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags**

<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">flags</a>



<b>Tree</b>	<a href="#">flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Additional prefix reachability flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">flags</a> <i>flags</i> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>external-flag</b> External prefix flag. Set if the prefix has been redistributed from another protocol. This includes the case where multiple virtual routers are supported and the source of the redistributed prefix is another IS-IS instance.</li> <li>• <b>readvertisement-flag</b> Readvertisement flag. Set when the prefix has been leaked from one level to another (upwards or downwards).</li> <li>• <b>node-flag</b> Node flag. Set when the prefix identifies the advertising router, i.e., the prefix is a host prefix advertising a globally reachable address typically associated with a loopback address.</li> <li>• <b>elc-flag</b> Elc flag. Set for local host prefix of the originating node if it supports ELC on all interfaces</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref flags type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref ipv4-source-router-id</a>
<b>Tree</b>	<a href="#">ipv4-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>router-id string</b>	
<b>Description</b>	IPv4 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the ISIS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref ipv4-source-router-id router-id string</a>

<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref ipv4-source-router-id type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref ipv6-source-router-id</a>
<b>Tree</b>	<a href="#">ipv6-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv6 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref extended-ipv4-reachability prefixes prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref ipv6-source-router-id</a> <a href="#">router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref extended-ipv4-reachability prefixes prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref ipv6-source-router-id</a> <a href="#">type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sids**

<b>Description</b>	This container defines segment routing extensions for prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a>
<b>Tree</b>	<a href="#">prefix-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid** *value number*

<b>Description</b>	Prefix Segment-ID list. IGP-Prefix Segment is an IGP segment attached to an IGP prefix. An IGP-Prefix Segment is global (unless explicitly advertised otherwise) within the SR/IGP domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a> <a href="#">prefix-sid</a> <i>value</i> <i>number</i>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	IGP Prefix-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a> <a href="#">prefix-sid</a> <i>value</i> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *number*

<b>Description</b>	Prefix-SID algorithm to be used for path computation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <b>algorithm</b> <i>number</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with Prefix Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <b>flags</b> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>readvertisement</b> Readvertisement flag. When set, the prefix to which this Prefix-SID is attached, has been propagated by the router either from another level or from redistribution.</li> <li>• <b>node</b> Node flag. When set, the Prefix-SID refers to the router identified by the prefix. Typically, the N-Flag is set on Prefix-SIDs attached to a router loopback address.</li> <li>• <b>no-php</b> Penultimate-Hop-Popping flag. When set, then the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.</li> <li>• <b>explicit-null</b> Explicit-Null flag. When set, any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID having an Explicit-NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet.</li> <li>• <b>value</b> Value flag. When set, the Prefix-SID carries a value (instead of an index). By default the flag is UNSET.</li> </ul>

	<ul style="list-style-type: none"> <li>local</li> </ul> <p>Local flag. When set, the value/index carried by the Prefix-SID has local significance. By default the flag is UNSET.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag</b>	
<b>Description</b>	This container defines sub-TLV 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag32 number</b>	
<b>Description</b>	List of 32-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref tag tag32 number</a>
<b>Tree</b>	<a href="#">tag32</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag64</b>	
<b>Description</b>	This container defines sub-TLV 2.

<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref tag64</a>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag64 number</b>	
<b>Description</b>	List of 64-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string subtlvs subtlv type identityref tag64 tag64 number</a>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>undefined-subtlvs</b>	
<b>Description</b>	This container describes undefined ISIS TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-ipv4-reachability prefixes prefix prefix string undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**undefined-subtlv** *type number*

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-down** *boolean*

<b>Description</b>	The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-ipv4-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">up-down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-is-reachability**

<b>Description</b>	This container defines list of ISIS extended reachability neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability</a>
<b>Tree</b>	<a href="#">extended-is-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbors

<b>Description</b>	This container describes IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [system-id](#) *string*

<b>Description</b>	This list describes ISIS extended neighbors and reachability attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## system-id *string*

<b>Description</b>	System-id of the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instances

<b>Description</b>	This list contains all instances of an adjacency between the originating IS and the remote IS. Multiple instances are used where there are parallel adjacencies between two systems.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances</a>
<b>Tree</b>	<a href="#">instances</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instance *id number*

<b>Description</b>	Instance of the TLV to the remote IS neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## *id number*

<b>Description</b>	Unique identifier for the instance of the TLV for the IS neighbor. The instance ID is not required to be consistent across readvertisements of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric number**

<b>Description</b>	Metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <b>metric number</b>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subtlvs**

<b>Description</b>	This container describes IS Neighbor sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <b>subtlvs</b>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subtlv type identityref**

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs</a> <b>subtlv type</b> <i>identityref</i>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **adjacency-sids**

<b>Description</b>	This container defines segment routing adjacency SIDs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">adjacency-sids</a>
<b>Tree</b>	<a href="#">adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **adjacency-sid** *value number*

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies.
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	By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid value</a> <i>number</i>
<b>Tree</b>	<a href="#">adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <i>number</i>	
<b>Description</b>	Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Flags associated with Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid value</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• address-family Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• backup</li> </ul>

	Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).
	<ul style="list-style-type: none"> <li>value</li> </ul>
	Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.
	<ul style="list-style-type: none"> <li>local</li> </ul>
	Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.
	<ul style="list-style-type: none"> <li>set</li> </ul>
	Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight number</b>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids adjacency-sid value number weight number</a>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>admin-group</b>	
<b>Description</b>	This container defines sub-TLV 3.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref admin-group</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-group *number*

**Description** The administrative group sub-TLV contains a 4-octet bit mask assigned by the network administrator

Each set bit corresponds to one administrative group assigned to the interface. By convention, the least significant bit is referred to as group 0, and the most significant bit is referred to as group 31.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref admin-group admin-group](#) *number*

**Tree** [admin-group](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### application-specific-link-attributes

**Description** Application Specific Link Attributes. Sub-TLV = 16.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref application-specific-link-attributes](#)

**Tree** [application-specific-link-attributes](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### legacy *boolean*

**Description** When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLVs 22, 23, 25, 141, 222, and 223, in TLV 138, or in TLV 139 as appropriate.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes legacy](#) *boolean*

**Tree** [legacy](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loop-free-alternate** *boolean*

**Description** F bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes loop-free-alternate](#) *boolean*

**Tree** [loop-free-alternate](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rsvp-te** *boolean*

**Description** R bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes rsvp-te](#) *boolean*

**Tree** [rsvp-te](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sr-policy** *boolean*

**Description** S bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances](#)

	<a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">application-specific-link-attributes</a> <a href="#">sr-policy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sr-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>sub-sub-tlvs</b>	
<b>Description</b>	Enter the sub-sub-tlvs context
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">application-specific-link-attributes</a> <a href="#">sub-sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>admin-group</b> <i>number</i>	
<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-Sub-TLV = 3.
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">application-specific-link-attributes</a> <a href="#">sub-sub-tlvs</a> <a href="#">admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>maximum-link-bandwidth</b> <i>number</i>	
<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-Sub-TLV = 9.
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">application-specific-link-attributes</a> <a href="#">sub-sub-tlvs</a> <a href="#">maximum-link-bandwidth</a> <i>number</i>

<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-max-unidirectional-link-delay**

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anomolous** *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay anomolous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomolous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay** *number*

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>

<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes sub-sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available-bandwidth**

<b>Description</b>	This container defines unidirectional lavailable bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">instances</a> <a href="#">instance id</a> <a href="#">number</a> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">available-bandwidth</a>
<b>Tree</b>	<a href="#">available-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <i>binary</i>	
<b>Description</b>	The available bandwidth on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, available bandwidth is defined to be residual bandwidth minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <a href="#">string</a> <a href="#">level</a> <a href="#">level-number</a> <a href="#">number</a> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <a href="#">string</a> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">instances</a> <a href="#">instance id</a> <a href="#">number</a> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">available-bandwidth</a> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <a href="#">string</a> <a href="#">level</a> <a href="#">level-number</a> <a href="#">number</a> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <a href="#">string</a> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">instances</a> <a href="#">instance id</a> <a href="#">number</a> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <a href="#">identityref</a> <a href="#">available-bandwidth</a> <a href="#">type</a> <a href="#">identityref</a>

<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth-constraints**

<b>Description</b>	This container defines bandwidth-constraints. For DS-TE, the existing Maximum Reservable link bandwidth parameter is retained, but its semantics is generalized and interpreted as the aggregate bandwidth constraint across all Class-Types
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints</a>
<b>Tree</b>	<a href="#">bandwidth-constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth-constraint [model-id number](#)**

<b>Description</b>	List of the Bandwidth Constraints sub-TLV instances present in the TLV.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number</a>
<b>Tree</b>	<a href="#">bandwidth-constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### model-id *number*

<b>Description</b>	Identifier for the Bandwidth Constraints Model currently in use by the LSR initiating the IGP advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### constraints

<b>Description</b>	Constraints contained within the Bandwidth Constraints sub-TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints</a>
<b>Tree</b>	<a href="#">constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### constraint [constraint-id](#) *number*

<b>Description</b>	List of the constraints within the Bandwidth Constraints sub-TLV. The BC0 level is indicated by the constraint-id leaf being set to 0, with BCN being indicated by constraint-id N.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i>



<b>Tree</b>	<a href="#">constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>constraint-id</b> <i>number</i>	
<b>Description</b>	Unique reference for the bandwidth constraint level. BC0 is indicated by this leaf being set to zero, with BCN represented by this leaf being set to N.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <i>binary</i>	
<b>Description</b>	The bandwidth constraint, expressed as a 32-bit IEEE floating point number expressed in bytes per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-admin-group**

<b>Description</b>	This container defines sub-TLV 14.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">extended-admin-group</a>
<b>Tree</b>	<a href="#">extended-admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-admin-group** *number*

<b>Description</b>	The extended-admin-group sub-TLV is used in addition to the Administrative Groups when it is desirable to make more than 32 colors available for advertisement in a network.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">extended-admin-group</a> <a href="#">extended-admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">extended-admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-interface-address**

<b>Description</b>	This container defines sub-TLV 6.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-interface-address</a>
<b>Tree</b>	<a href="#">ipv4-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	A 4-octet IPv4 address for the interface described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-interface-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-neighbor-address

<b>Description</b>	This container defines sub-TLV 8.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	A single IPv4 address for a neighboring router on this link. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">extended-is-reachability neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-neighbor-address address string</a>
<b>Tree</b>	<a href="#">address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-interface-address</b>	
<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref ipv6-interface-address</a>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>address</b> <i>string</i>	
<b>Description</b>	Contains a 16-octet IPv6 address for the interface described by the containing Extended IS Reachability TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref ipv6-interface-address address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-neighbor-address</b>	
<b>Description</b>	This container defines sub-TLV 13.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref ipv6-neighbor-address</a>

<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	Contains a 16-octet IPv6 address for a neighboring router on the link described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref ipv6-neighbor-address address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-adjacency-sids**

<b>Description</b>	This container defines segment routing LAN adjacency SIDs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids</a>
<b>Tree</b>	<a href="#">lan-adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-adjacency-sid** *value* *number*

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i>
<b>Tree</b>	<a href="#">lan-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <i>number</i>	
<b>Description</b>	LAN Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Flags associated with LAN-Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">address-family</a> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <a href="#">backup</a> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <a href="#">value</a></li> </ul>

	Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.
	<ul style="list-style-type: none"> <li>local</li> </ul> <p>Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</p>
	<ul style="list-style-type: none"> <li>set</li> </ul> <p>Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>neighbor-id</b> <i>string</i>	
<b>Description</b>	System ID of the neighbor associated with the LAN- Adj-Segment-ID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">neighbor-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight</b> <i>number</i>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-attributes

**Description** This container defines link-attributes.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref](#) [link-attributes](#)

**Tree** [link-attributes](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-protection *keyword*

**Description** Link local-protection attributes.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref](#) [link-attributes local-protection](#) *keyword*

**Tree** [local-protection](#)

- Options**
- [local-protection](#)  
If set, local protection is available for the link.
  - [link-excluded](#)  
If set, the link is excluded from local protection.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-delay

**Description** This container defines unidirectional link delay.



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-delay</a>
<b>Tree</b>	<a href="#">link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit</b> <i>boolean</i>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-delay a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>delay</b> <i>number</i>	
<b>Description</b>	Average link delay value (in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-delay delay</a> <i>number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-delay-variation**

<b>Description</b>	This container defines unidirectional link delay variation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay-variation</a>
<b>Tree</b>	<a href="#">link-delay-variation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay** *number*

<b>Description</b>	Average link delay between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay-variation delay</a> <i>number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-id**

<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-id</a>
<b>Tree</b>	<a href="#">link-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local *number*

<b>Description</b>	The value field of this sub-TLV contains 4 octets of Link Local Identifier followed by 4 octets of Link Remote Identifier.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-id local number</a>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote *number*

<b>Description</b>	If the Link Remote Identifier is unknown, it is set to 0.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-id remote number</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-loss

<b>Description</b>	This container defines unidirectional link loss delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-loss</a>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **a-bit** *boolean*

<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-loss a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **link-loss** *number*

<b>Description</b>	Link packet loss as a percentage of the total traffic sent over a configurable interval. The basic unit is 0.000003%, where $(2^{24} - 2)$ is 50.331642%. This value is the highest packet-loss percentage that can be expressed (the assumption being that precision is more important on high-speed links than the ability to advertise loss rates greater than this, and that high-speed links with over 50% loss are unusable). Therefore, measured values that are larger than the field maximum SHOULD be encoded as the maximum value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-loss link-loss</a> <i>number</i>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **link-protection-type**

<b>Description</b>	ISIS LSDB parameters relating to the type of link protection offered.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>

	<a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <i>identityref</i> <a href="#">link-protection-type</a>
<b>Tree</b>	<a href="#">link-protection-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>keyword</i>	
<b>Description</b>	Link protection capabilities.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <i>name</i> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <a href="#">type</a> <i>identityref</i> <a href="#">extended-is-reachability</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <a href="#">type</a> <i>identityref</i> <a href="#">link-protection-type</a> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>extra-traffic</b> If set the link has extra traffic protection. If the link is of type Extra Traffic, it means that the link is protecting another link or links. The LSPs on a link of this type will be lost if any of the links it is protecting fail.</li> <li>• <b>unprotected</b> If set, the link is unprotected. If the link is of type Unprotected, it means that there is no other link protecting this link. The LSPs on a link of this type will be lost if the link fails.</li> <li>• <b>shared</b> If set, the link has shared protection. If the link is of type Shared, it means that there are one or more disjoint links of type Extra Traffic that are protecting this link. These Extra Traffic links are shared between one or more links of type Shared.</li> <li>• <b>one-one</b> If set, the link has dedicated 1:1 protection. If the link is of type Dedicated 1:1, it means that there is one dedicated disjoint link of type Extra Traffic that is protecting this link.</li> <li>• <b>plus-one</b> If set, the link has dedicated 1+1 protection. If the link is of type Dedicated 1+1, it means that a dedicated disjoint link is protecting this link. However, the protecting link is not advertised in the link state database and is therefore not available for the routing of LSPs.</li> <li>• <b>enhanced</b></li> </ul>

If set the link has enhanced protection. If the link is of type Enhanced, it means that a protection scheme that is more reliable than Dedicated 1+1, e.g., 4 fiber BLSR/MS-SPRING, is being used to protect this link.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-link-bandwidth

**Description** This container defines sub-TLV 9.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref max-link-bandwidth](#)

**Tree** [max-link-bandwidth](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

**Description** The maximum bandwidth that can be used on this link in this direction (from the system originating the LSP to its neighbors). It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref max-link-bandwidth bandwidth](#) *binary*

**Tree** [bandwidth](#)

**String Length** 4

**Units** bytes per second

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-reservable-link-bandwidth**

<b>Description</b>	This container defines sub-TLV 10.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-reservable-link-bandwidth</a>
<b>Tree</b>	<a href="#">max-reservable-link-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The maximum amount of bandwidth that can be reserved in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-reservable-link-bandwidth</a> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-max-link-delay**

<b>Description</b>	This container defines min/max link delay.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">min-max-link-delay</a>
<b>Tree</b>	<a href="#">min-max-link-delay</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit</b> <i>boolean</i>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>max-delay</b> <i>number</i>	
<b>Description</b>	Maximum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>min-delay</b> <i>number</i>	
<b>Description</b>	Minimum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.



**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [min-max-link-delay min-delay](#) *number*

**Tree** [min-delay](#)

**Units** microseconds

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## residual-bandwidth

**Description** This container defines unidirectional residual bandwidth.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [residual-bandwidth](#)

**Tree** [residual-bandwidth](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bandwidth *binary*

**Description** Residual bandwidth on a link, forwarding adjacency [RFC4206], or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, residual bandwidth is defined to be the Maximum Bandwidth [RFC5305] minus the bandwidth currently allocated to RSVP-TE label switched paths. For a bundled link, residual bandwidth is defined to be the sum of the component link residual bandwidths.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [extended-is-reachability neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [residual-bandwidth](#) [bandwidth](#) *binary*

**Tree** [bandwidth](#)

**String Length** 4

**Units** bytes per second

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>te-default-metric</b>	
<b>Description</b>	This container defines sub-TLV 18.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref te-default-metric</a>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>metric number</b>	
<b>Description</b>	This metric is administratively assigned and can be used to present a differently weighted topology to traffic engineering SPF calculations. To preclude overflow within a traffic engineering SPF implementation, all metrics greater than or equal to MAX_PATH_METRIC SHALL be considered to have a metric of MAX_PATH_METRIC.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref te-default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>unconstrained-lsp</b>	
<b>Description</b>	This container defines sub-TLV 23.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref unconstrained-lsp</a>
<b>Tree</b>	<a href="#">unconstrained-lsp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>count number</b>	
<b>Description</b>	Unconstrained TE LSP count(TE Label Switched Paths (LSPs) signalled with zero bandwidth).
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref unconstrained-lsp count number</a>
<b>Tree</b>	<a href="#">count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref unconstrained-lsp type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unreserved-bandwidth

**Description** This container defines unreserved-bandwidth. The units are bytes per second.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [extended-is-reachability neighbors neighbor system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [unreserved-bandwidth](#)

**Tree** [unreserved-bandwidth](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### setup-priority [priority number](#)

**Description** Enter the setup-priority list instance

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [extended-is-reachability neighbors neighbor system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [unreserved-bandwidth](#) [setup-priority priority number](#)

**Tree** [setup-priority](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority [number](#)

**Description** Setup priority level of 0 through 7 to be used by Unreserved Bandwidth sub-TLV 11.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [extended-is-reachability neighbors neighbor system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [unreserved-bandwidth](#) [setup-priority priority number](#)

<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth <i>binary</i></b>	
<b>Description</b>	The amount of bandwidth reservable in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It contains eight 32-bit IEEE floating point numbers(one for each priority). The units are bytes (not bits!) per second. The values correspond to the bandwidth that can be reserved with a setup priority of 0 through 7, arranged in increasing order with priority 0 occurring at the start of the sub-TLV, and priority 7 at the end of the sub-TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unreserved-bandwidth setup-priority</a> <i>priority</i> <i>number</i> <i>bandwidth</i> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>utilized-bandwidth</b>	
<b>Description</b>	This container defines unidirectional utilized bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">utilized-bandwidth</a>
<b>Tree</b>	<a href="#">utilized-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The bandwidth utilization on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, bandwidth utilization represents the actual utilization of the link (i.e., as measured by the advertising node). For a bundled link, bandwidth utilization is defined to be the sum of the component link bandwidth utilizations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">utilized-bandwidth bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">utilized-bandwidth type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undefined-subtlvs

<b>Description</b>	This container describes undefined ISIS TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undefined-subtlv [type number](#)

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number undefined-subtlvs undefined-subtlv type number</a>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [type number](#)

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id string instances instance id number undefined-subtlvs undefined-subtlv type number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref extended-is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hostname**

<b>Description</b>	This container defines TLV 137.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref hostname</a>
<b>Tree</b>	<a href="#">hostname</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**hostname** *string*

<b>Description</b>	Name of the node.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">hostname hostname</a> <i>string</i>
<b>Tree</b>	<a href="#">hostname</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-ids**

<b>Description</b>	This container defines ISIS Instance Identifier TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">instance-ids</a>
<b>Tree</b>	<a href="#">instance-ids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-id** [instance-id](#) *number*

<b>Description</b>	A list of instance IDs received within TLV 7 within an IS-IS LSP. In the case that more than one instance of TLV 7 is included in the LSP, the instance IDs specified within the instances are concatenated within this list.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">instance-ids instance-id instance-id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-id number**

<b>Description</b>	An Instance Identifier (IID) to uniquely identify an IS-IS instance. When the IID = 0, the list of supported ITIDs MUST NOT be present. An IID-TLV with IID = 0 MUST NOT appear in an SNP or LSP. When the TLV appears (with a non-zero IID) in an SNP or LSP, exactly one ITID. MUST be present indicating the topology with which the PDU is associated. If no ITIDs or multiple ITIDs are present or the IID is zero, then the PDU MUST be ignored.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref instance-ids instance-id instance-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**topology-id number**

<b>Description</b>	Instance-Specific Topology Identifiers (ITIDs).
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref instance-ids instance-id instance-id number topology-id number</a>
<b>Tree</b>	<a href="#">topology-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-external-reachability**

<b>Description</b>	This container defines list of IPv4 external reachability information.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-external-reachability</a>
<b>Tree</b>	<a href="#">ipv4-external-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefixes

<b>Description</b>	This container describes IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes</a>
<b>Tree</b>	<a href="#">prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix [prefix](#) *string*

<b>Description</b>	IPv4 external prefixes and reachability attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix *string*

<b>Description</b>	IPv4 prefix contained within reachability TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**default-metric**

<b>Description</b>	This container defines ISIS Default Metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">default-metric</a>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	ISIS Default-Metric Flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">default-metric flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal When set to zero, indicates internal metrics.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric** *number*

<b>Description</b>	<p>ISIS default metric value</p> <p>This is a metric understood by every Intermediate system in the domain. Each circuit shall have a positive integral value assigned for this metric. The value may be associated with any objective function of the circuit, but by convention is intended to measure the capacity of the circuit for handling traffic, for example, its throughput in bits-per-second. Higher values indicate a lower capacity.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">ipv4-external-reachability prefixes prefix prefix string default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>delay-metric</b>	
<b>Description</b>	This container defines the ISIS delay metric.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix string delay-metric</a>
<b>Tree</b>	<a href="#">delay-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags keyword</b>	
<b>Description</b>	ISIS Delay Metric Flags.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix string delay-metric flags keyword</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• internal When this flag is not set, internal metrics are in use.</li> <li>• unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric number**

<b>Description</b>	ISIS delay metric value  This metric measures the transit delay of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value. Higher values indicate a longer transit delay.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix string</a> <a href="#">delay-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-metric**

<b>Description</b>	This container defines the ISIS error metric.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix string</a> <a href="#">error-metric</a>
<b>Tree</b>	<a href="#">error-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flags keyword**

<b>Description</b>	IS-IS error metric flags.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-external-reachability prefixes prefix prefix string</a> <a href="#">error-metric flags keyword</a>

<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal When this flag is not set, internal metrics are in use.</li> <li>unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric number**

<b>Description</b>	<p>ISIS error metric value</p> <p>This metric measures the residual error probability of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a non-zero value. Higher values indicate a larger probability of undetected errors on the circuit.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">error-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **expense-metric**

<b>Description</b>	This container defines the ISIS expense metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">expense-metric</a>
<b>Tree</b>	<a href="#">expense-metric</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags keyword

**Description** ISIS Expense Metric Flags.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix string expense-metric flags keyword](#)

**Tree** [flags](#)

**Options**

- internal  
When this flag is not set, internal metrics are in use.
- unsupported  
When this flag (referred to as the S-bit) is set, then the metric is unsupported.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## metric number

**Description** ISIS expense metric value

This metric measures the monetary cost of utilising the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value<sup>1</sup>). Higher values indicate a larger monetary expense.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-external-reachability prefixes prefix prefix string expense-metric metric number](#)

**Tree** [metric](#)

**Range** 1 to 63

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**up-down** *boolean*

<b>Description</b>	The up/down bit  Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv4-external-reachability prefixes prefix</a> <i>string</i> <b>up-down</b> <i>boolean</i>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-interface-addresses**

<b>Description</b>	This container defines TLV 132.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <b>ipv4-interface-addresses</b>
<b>Tree</b>	<a href="#">ipv4-interface-addresses</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	IPv4 address(es) of the interface corresponding to the SNPA over which this PDU is to be transmitted.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv4-interface-addresses address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-internal-reachability

<b>Description</b>	This container defines list of IPv4 internal reachability information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability</a>
<b>Tree</b>	<a href="#">ipv4-internal-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefixes

<b>Description</b>	This container describes IS prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes</a>
<b>Tree</b>	<a href="#">prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix *prefix string*

<b>Description</b>	IPv4 prefixes and internal reachability attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	IPv4 prefix contained within reachability TLVs.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**default-metric**

<b>Description</b>	This container defines ISIS Default Metric.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix string</a> <a href="#">default-metric</a>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags keyword**

<b>Description</b>	ISIS Default-Metric Flags.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix string</a> <a href="#">default-metric flags keyword</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal</li> </ul> <p>When set to zero, indicates internal metrics.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	ISIS default metric value  This is a metric understood by every Intermediate system in the domain. Each circuit shall have a positive integral value assigned for this metric. The value may be associated with any objective function of the circuit, but by convention is intended to measure the capacity of the circuit for handling traffic, for example, its throughput in bits-per-second. Higher values indicate a lower capacity.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-metric**

<b>Description</b>	This container defines the ISIS delay metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">delay-metric</a>
<b>Tree</b>	<a href="#">delay-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags keyword**

<b>Description</b>	ISIS Delay Metric Flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">delay-metric flags</a> <i>keyword</i>

<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal When this flag is not set, internal metrics are in use.</li> <li>unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric number**

<b>Description</b>	<p>ISIS delay metric value</p> <p>This metric measures the transit delay of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value. Higher values indicate a longer transit delay.</p>
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix string delay-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-metric**

<b>Description</b>	This container defines the ISIS error metric.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix string error-metric</a>
<b>Tree</b>	<a href="#">error-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags keyword

<b>Description</b>	IS-IS error metric flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <b>error-metric flags</b> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal When this flag is not set, internal metrics are in use.</li> <li>unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## metric number

<b>Description</b>	<p>ISIS error metric value</p> <p>This metric measures the residual error probability of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a non-zero value. Higher values indicate a larger probability of undetected errors on the circuit.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <b>error-metric metric number</b> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expense-metric**

<b>Description</b>	This container defines the ISIS expense metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">expense-metric</a>
<b>Tree</b>	<a href="#">expense-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	ISIS Expense Metric Flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">expense-metric flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>internal</b> When this flag is not set, internal metrics are in use.</li> <li>• <b>unsupported</b> When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric** *number*

<b>Description</b>	ISIS expense metric value  This metric measures the monetary cost of utilising the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value <sup>1</sup> ). Higher values indicate a larger monetary expense.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">expense-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>up-down</b> <i>boolean</i>	
<b>Description</b>	The up/down bit  Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-internal-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">up-down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-srlgs</b>	
<b>Description</b>	This container defines ISIS SRLG TLV 138.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs</a>
<b>Tree</b>	<a href="#">ipv4-srlgs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**ipv4-srlg** *instance-number number*

<b>Description</b>	Instance of the IPv4 SRLG TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i>
<b>Tree</b>	<a href="#">ipv4-srlg</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-number** *number*

<b>Description</b>	An arbitrary unsigned 32-bit integer used to disambiguate the instance of TLV 138. The instance identifier is synthesised by the system and may be renumbered for the same SRLG definition in subsequent advertised LSPs if (and only if) the entire list of SRLGs is replaced.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	SRLG flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>numbered</li> </ul> <p>When set, the interface is numbered, whereas if unset indicates that the interface is unnumbered.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-interface-address *string*

<b>Description</b>	IPv4 interface address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">ipv4-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-neighbor-address *string*

<b>Description</b>	IPv4 neighbor address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">ipv4-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### psn-number *number*

<b>Description</b>	Pseudonode number if the neighbor is on a LAN interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">psn-number</a> <i>number</i>
<b>Tree</b>	<a href="#">psn-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srlg-value** *number*

<b>Description</b>	List of SRLG values.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">srlg-value</a> <i>number</i>
<b>Tree</b>	<a href="#">srlg-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-id** *string*

<b>Description</b>	Neighbor system ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-srlgs ipv4-srlg instance-number</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-te-router-id**

<b>Description</b>	This container defines TLV 134.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv4-te-router-id</a>
<b>Tree</b>	<a href="#">ipv4-te-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id string**

<b>Description</b>	IPv4 Traffic Engineering router ID of the node. For traffic engineering, it guarantees that we have a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv4-te-router-id router-id string</a>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-interface-addresses**

<b>Description</b>	This container defines TLV 232.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-interface-addresses</a>
<b>Tree</b>	<a href="#">ipv6-interface-addresses</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	IPv6 interface addresses of the node. MUST contain only the non-link-local IPv6 addresses assigned to the IS.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-interface-addresses address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-reachability

<b>Description</b>	This container defines list of IPv6 reachability information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability</a>
<b>Tree</b>	<a href="#">ipv6-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefixes

<b>Description</b>	This container describes IS prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes</a>
<b>Tree</b>	<a href="#">prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix [prefix](#) *string*

<b>Description</b>	This list defines IPv6 extended prefix attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes</a> <a href="#">prefix</a> <a href="#">prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	IPv6 prefix contained within extended reachability TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**s-bit boolean**

<b>Description</b>	The sub-tlv present bit. If UNSET, the octets of Sub-TLVs are not present. Otherwise, the bit is set and the octet following the prefix will contain the length of the Sub-TLV portion of the structure.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string s-bit boolean</a>
<b>Tree</b>	<a href="#">s-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS prefix sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv** [type](#) *identityref*

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags

**Description** This container defines sub-TLV 4.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref ipv6-reachability prefixes prefix prefix](#) *string* [subtlvs subtlv type identityref flags](#)

**Tree** [flags](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags *keyword*

**Description** Additional prefix reachability flags.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref ipv6-reachability prefixes prefix prefix](#) *string* [subtlvs subtlv type identityref flags flags](#) *keyword*

**Tree** [flags](#)

## Options

- external-flag

External prefix flag. Set if the prefix has been redistributed from another protocol. This includes the case where multiple virtual routers are supported and the source of the redistributed prefix is another IS-IS instance.

- readvertisement-flag

Readvertisement flag. Set when the prefix has been leaked from one level to another (upwards or downwards).

- node-flag

Node flag. Set when the prefix identifies the advertising router, i.e., the prefix is a host prefix advertising a globally reachable address typically associated with a loopback address.

- elc-flag

Elc flag. Set for local host prefix of the originating node if it supports ELC on all interfaces



<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string subtlvs subtlv type identityref flags type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string subtlvs subtlv type identityref ipv4-source-router-id</a>
<b>Tree</b>	<a href="#">ipv4-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv4 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-source-router-id</a> <i>router-id</i> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-source-router-id</a> <i>type</i> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-source-router-id**

<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-source-router-id</a>
<b>Tree</b>	<a href="#">ipv6-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv6 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-source-router-id router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-source-router-id type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>is-reachability-subtlvs-type</b> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <b>ip-reachability-subtlvs-type</b> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <b>router-capability-subtlvs-type</b> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>prefix-sids</b>	
<b>Description</b>	This container defines segment routing extensions for prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a>
<b>Tree</b>	<a href="#">prefix-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>prefix-sid</b> <a href="#">value</a> <i>number</i>	
<b>Description</b>	Prefix Segment-ID list. IGP-Prefix Segment is an IGP segment attached to an IGP prefix. An IGP-Prefix Segment is global (unless explicitly advertised otherwise) within the SR/IGP domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid</a> <a href="#">value</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	IGP Prefix-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *number*

<b>Description</b>	Prefix-SID algorithm to be used for path computation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with Prefix Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>readvertisement           <p>Readvertisement flag. When set, the prefix to which this Prefix-SID is attached, has been propagated by the router either from another level or from redistribution.</p> </li> <li>node           <p>Node flag. When set, the Prefix-SID refers to the router identified by the prefix. Typically, the N-Flag is set on Prefix-SIDs attached to a router loopback address.</p> </li> </ul>

	<ul style="list-style-type: none"> <li>• <b>no-php</b> Penultimate-Hop-Popping flag. When set, then the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.</li> <li>• <b>explicit-null</b> Explicit-Null flag. When set, any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID having an Explicit-NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet.</li> <li>• <b>value</b> Value flag. When set, the Prefix-SID carries a value (instead of an index). By default the flag is UNSET.</li> <li>• <b>local</b> Local flag. When set, the value/index carried by the Prefix-SID has local significance. By default the flag is UNSET.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag</b>	
<b>Description</b>	This container defines sub-TLV 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag32 number</b>	
<b>Description</b>	List of 32-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>

	<a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref tag tag32</a> <i>number</i>
<b>Tree</b>	<a href="#">tag32</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag64</b>	
<b>Description</b>	This container defines sub-TLV 2.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref tag64</a>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag64 number</b>	
<b>Description</b>	List of 64-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">subtlvs subtlv type identityref tag64 tag64</a> <i>number</i>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>undefined-subtlvs</b>	
<b>Description</b>	This container describes undefined ISIS TLVs.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **undefined-subtlv** *type number*

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs</a> <a href="#">undefined-subtlv type</a> <i>number</i>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">undefined-subtlvs</a> <a href="#">undefined-subtlv type</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>



	<a href="#">ipv6-reachability prefixes prefix prefix string undefined-subtlvs undefined-subtlv type number length number</a>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value binary</b>	
<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string undefined-subtlvs undefined-subtlv type number value binary</a>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>up-down boolean</b>	
<b>Description</b>	The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref ipv6-reachability prefixes prefix prefix string up-down boolean</a>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**x-bit** *boolean*

<b>Description</b>	The external bit. Set when the prefix was distributed into IS-IS from another routing protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-reachability prefixes prefix</a> <i>string</i> <b>x-bit</b> <i>boolean</i>
<b>Tree</b>	<a href="#">x-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-srlgs**

<b>Description</b>	This container defines ISIS SRLG TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs</a>
<b>Tree</b>	<a href="#">ipv6-srlgs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-srlg** *instance-number* *number*

<b>Description</b>	Instance of the IPv6 SRLG TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs</a> <a href="#">ipv6-srlg instance-number</a> <i>number</i>
<b>Tree</b>	<a href="#">ipv6-srlg</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-number** *number*

<b>Description</b>	An arbitrary unsigned 32-bit integer used to disambiguate the instance of TLV 138. The instance identifier is synthesised by the system and may be renumbered for the same SRLG definition in subsequent advertised LSPs if (and only if) the entire list of SRLGs is replaced.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	IPv6 SRLG flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>na</li> </ul> <p>When set, the IPv6 neighbour address is included, whereas if unset, it is omitted</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-interface-address** *string*

<b>Description</b>	IPv6 interface address or Link Local Identifier.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">ipv6-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-neighbor-address *string*

<b>Description</b>	IPv6 neighbor address or Link Remote Identifier.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">ipv6-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### psn-number *number*

<b>Description</b>	Pseudonode number if the neighbor is on a LAN interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">psn-number</a> <i>number</i>
<b>Tree</b>	<a href="#">psn-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### srlg-value *number*

<b>Description</b>	SRLG values.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">srlg-value</a> <i>number</i>
<b>Tree</b>	<a href="#">srlg-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-id** *string*

<b>Description</b>	Neighbor system ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-srlgs ipv6-srlg instance-number</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-te-router-id**

<b>Description</b>	This container defines TLV 140.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-te-router-id</a>
<b>Tree</b>	<a href="#">ipv6-te-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv6 Traffic Engineering router ID of the node. For traffic engineering, it guarantees that we have a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">ipv6-te-router-id router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## is-alias-id

<b>Description</b>	This container defines the IS-Alias TLV which allows extension-capable ISs to recognize the Originating System of an Extended LSP set. It identifies the Normal system-id of the Originating System.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-alias-id</a>
<b>Tree</b>	<a href="#">is-alias-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## alias-id *string*

<b>Description</b>	List of alias ID(s).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-alias-id alias-id</a> <i>string</i>
<b>Tree</b>	<a href="#">alias-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## is-reachability

<b>Description</b>	This container describes list of ISIS neighbors and attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability</a>
<b>Tree</b>	<a href="#">is-reachability</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbors

**Description** This container describes IS neighbors.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors](#)

**Tree** [neighbors](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [system-id](#) *string*

**Description** IS reachability neighbor attributes.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors neighbor system-id](#) *string*

**Tree** [neighbor](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## system-id *string*

**Description** System-ID of IS neighbor.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors neighbor system-id](#) *string*

**String Length** 14

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## default-metric

<b>Description</b>	This container defines ISIS Default Metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">default-metric</a>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags *keyword*

<b>Description</b>	ISIS Default-Metric Flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">default-metric flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal</li> </ul> <p>When set to zero, indicates internal metrics.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## metric *number*

<b>Description</b>	<p>ISIS default metric value</p> <p>This is a metric understood by every Intermediate system in the domain. Each circuit shall have a positive integral value assigned for this metric. The value may be associated with any objective function of the circuit, but by convention is intended to measure the capacity of the circuit for handling traffic, for example, its throughput in bits-per-second. Higher values indicate a lower capacity.</p>
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">default-metric metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delay-metric

<b>Description</b>	This container defines the ISIS delay metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">delay-metric</a>
<b>Tree</b>	<a href="#">delay-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags *keyword*

<b>Description</b>	ISIS Delay Metric Flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref is-reachability neighbors neighbor system-id</a> <i>string</i> <a href="#">delay-metric flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>internal When this flag is not set, internal metrics are in use.</li> <li>unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric** *number*

#### **Description**

ISIS delay metric value

This metric measures the transit delay of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value. Higher values indicate a longer transit delay.

#### **Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors neighbor system-id](#) *string* [delay-metric](#) *metric* *number*

#### **Tree**

[metric](#)

#### **Range**

1 to 63

#### **Configurable**

False

#### **Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-metric**

#### **Description**

This container defines the ISIS error metric.

#### **Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors neighbor system-id](#) *string* [error-metric](#)

#### **Tree**

[error-metric](#)

#### **Configurable**

False

#### **Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flags** *keyword*

#### **Description**

IS-IS error metric flags.

#### **Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref is-reachability neighbors neighbor system-id](#) *string* [error-metric flags](#) *keyword*

#### **Tree**

[flags](#)

- Options**
- **internal**  
When this flag is not set, internal metrics are in use.
  - **unsupported**  
When this flag (referred to as the S-bit) is set, then the metric is unsupported.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## metric number

**Description** ISIS error metric value

This metric measures the residual error probability of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a non-zero value. Higher values indicate a larger probability of undetected errors on the circuit.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref is-reachability neighbors neighbor system-id string error-metric metric number](#)

**Tree** [metric](#)

**Range** 1 to 63

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## expense-metric

**Description** This container defines the ISIS expense metric.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref is-reachability neighbors neighbor system-id string expense-metric](#)

**Tree** [expense-metric](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags keyword

<b>Description</b>	ISIS Expense Metric Flags.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref is-reachability neighbors neighbor system-id string expense-metric flags keyword</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• internal When this flag is not set, internal metrics are in use.</li> <li>• unsupported When this flag (referred to as the S-bit) is set, then the metric is unsupported.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## metric number

<b>Description</b>	<p>ISIS expense metric value</p> <p>This metric measures the monetary cost of utilising the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value<sup>1</sup>). Higher values indicate a larger monetary expense.</p>
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref is-reachability neighbors neighbor system-id string expense-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## isis-neighbor-attribute

<b>Description</b>	This container defines list of ISIS topology neighbors for extended ISIS LSP (multiple system IDs).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute</a>
<b>Tree</b>	<a href="#">isis-neighbor-attribute</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbors

<b>Description</b>	This container describes IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor [system-id](#) *string*

<b>Description</b>	This list describes ISIS extended neighbors and reachability attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-id** *string*

<b>Description</b>	System-id of the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instances**

<b>Description</b>	This list contains all instances of an adjacency between the originating IS and the remote IS. Multiple instances are used where there are parallel adjacencies between two systems.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances</a>
<b>Tree</b>	<a href="#">instances</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance** *id number*

<b>Description</b>	Instance of the TLV to the remote IS neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	Unique identifier for the instance of the TLV for the IS neighbor. The instance ID is not required to be consistent across across readvertisements of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	Metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS Neighbor sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv type identityref**

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref</a>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type identityref**

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sids**

<b>Description</b>	This container defines segment routing adjacency SIDs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids</a>



<b>Tree</b>	<a href="#">adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sid** *value number*

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid value</a> <i>number</i>
<b>Tree</b>	<a href="#">adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">adjacency-sids</a> <a href="#">adjacency-</a> <a href="#">sid</a> <i>value</i> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">address-family</a> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <a href="#">backup</a> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <a href="#">value</a> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> <li>• <a href="#">local</a> Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</li> <li>• <a href="#">set</a> Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight</b> <i>number</i>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <i>name</i> <i>string</i> <a href="#">level</a> <a href="#">level-</a> <a href="#">number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">adjacency-sids</a> <a href="#">adjacency-</a> <a href="#">sid</a> <i>value</i> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group**

<b>Description</b>	This container defines sub-TLV 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">admin-group</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group** *number*

<b>Description</b>	The administrative group sub-TLV contains a 4-octet bit mask assigned by the network administrator  Each set bit corresponds to one administrative group assigned to the interface. By convention, the least significant bit is referred to as group 0, and the most significant bit is referred to as group 31.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">admin-group admin-group number</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available-bandwidth**

<b>Description</b>	This container defines unidirectional lavailable bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth</a>
<b>Tree</b>	<a href="#">available-bandwidth</a>
<b>Configurable</b>	False

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <i>binary</i>	
<b>Description</b>	The available bandwidth on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, available bandwidth is defined to be residual bandwidth minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a></li> </ul>

Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.

- router-capability-subtlvs-type

Base identity for an ISIS TLV 242 SUB-TLV type.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth-constraints

**Description** This container defines bandwidth-constraints. For DS-TE, the existing Maximum Reservable link bandwidth parameter is retained, but its semantics is generalized and interpreted as the aggregate bandwidth constraint across all Class-Types

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints](#)

**Tree** [bandwidth-constraints](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth-constraint [model-id number](#)

**Description** List of the Bandwidth Constraints sub-TLV instances present in the TLV.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number](#)

**Tree** [bandwidth-constraint](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**model-id** *number*

<b>Description</b>	Identifier for the Bandwidth Constraints Model currently in use by the LSR initiating the IGP advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**constraints**

<b>Description</b>	Constraints contained within the Bandwidth Constraints sub-TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints</a>
<b>Tree</b>	<a href="#">constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**constraint** [constraint-id](#) *number*

<b>Description</b>	List of the constraints within the Bandwidth Constraints sub-TLV. The BC0 level is indicated by the constraint-id leaf being set to 0, with BCN being indicated by constraint-id N.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i>
<b>Tree</b>	<a href="#">constraint</a>
<b>Configurable</b>	False

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>constraint-id</b> <i>number</i>	
<b>Description</b>	Unique reference for the bandwidth constraint level. BC0 is indicated by this leaf being set to zero, with BCN represented by this leaf being set to N.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <i>binary</i>	
<b>Description</b>	The bandwidth constraint, expressed as a 32-bit IEEE floating point number expressed in bytes per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>extended-admin-group</b>	
<b>Description</b>	This container defines sub-TLV 14.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [isis-neighbor-attribute neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [extended-admin-group](#)

**Tree** [extended-admin-group](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **extended-admin-group** *number*

**Description** The extended-admin-group sub-TLV is used in addition to the Administrative Groups when it is desirable to make more than 32 colors available for advertisement in a network.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [isis-neighbor-attribute neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [extended-admin-group extended-admin-group](#) *number*

**Tree** [extended-admin-group](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-interface-address**

**Description** This container defines sub-TLV 6.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [isis-neighbor-attribute neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [ipv4-interface-address](#)

**Tree** [ipv4-interface-address](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**address string**

<b>Description</b>	A 4-octet IPv4 address for the interface described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-interface-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-neighbor-address**

<b>Description</b>	This container defines sub-TLV 8.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	A single IPv4 address for a neighboring router on this link. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-neighbor-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-interface-address

<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-interface-address</a>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	Contains a 16-octet IPv6 address for the interface described by the containing Extended IS Reachability TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-interface-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-neighbor-address

<b>Description</b>	This container defines sub-TLV 13.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address *string*

**Description** Contains a 16-octet IPv6 address for a neighboring router on the link described by the (main) TLV. This sub-TLV can occur multiple times.

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [level level-number \*number\*](#) [link-state-database lsp lsp-id \*string\*](#) [tlvs tlv type \*identityref\*](#) [isis-neighbor-attribute neighbors neighbor system-id \*string\*](#) [instances instance id \*number\*](#) [subtlvs subtlv type \*identityref\*](#) [ipv6-neighbor-address address \*string\*](#)

**Tree** [address](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lan-adjacency-sids

**Description** This container defines segment routing LAN adjacency SIDs

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [level level-number \*number\*](#) [link-state-database lsp lsp-id \*string\*](#) [tlvs tlv type \*identityref\*](#) [isis-neighbor-attribute neighbors neighbor system-id \*string\*](#) [instances instance id \*number\*](#) [subtlvs subtlv type \*identityref\*](#) [lan-adjacency-sids](#)

**Tree** [lan-adjacency-sids](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lan-adjacency-sid *value number*

**Description** Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.

**Context** [network-instance name \*string\*](#) [protocols isis instance name \*string\*](#) [level level-number \*number\*](#) [link-state-database lsp lsp-id \*string\*](#) [tlvs tlv type \*identityref\*](#) [isis-neighbor-attribute neighbors neighbor system-id \*string\*](#) [instances](#)

	<a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">lan-adjacency-sids</a> <a href="#">lan-adjacency-sid value</a> <i>number</i>
<b>Tree</b>	<a href="#">lan-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <i>number</i>	
<b>Description</b>	LAN Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv type</a> <a href="#">identityref</a> <a href="#">isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">lan-adjacency-sids</a> <a href="#">lan-adjacency-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Flags associated with LAN-Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv type</a> <a href="#">identityref</a> <a href="#">isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">lan-adjacency-sids</a> <a href="#">lan-adjacency-sid value</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">address-family</a> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <a href="#">backup</a> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <a href="#">value</a> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> <li>• <a href="#">local</a></li> </ul>

Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.

- set

Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>neighbor-id</b> <i>string</i>	
<b>Description</b>	System ID of the neighbor associated with the LAN- Adj-Segment-ID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">neighbor-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight</b> <i>number</i>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-attributes**

<b>Description</b>	This container defines link-attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-attributes</a>
<b>Tree</b>	<a href="#">link-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-protection** *keyword*

<b>Description</b>	Link local-protection attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-attributes</a> <a href="#">local-protection</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-protection</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">local-protection</a> If set, local protection is available for the link.</li> <li>• <a href="#">link-excluded</a> If set, the link is excluded from local protection.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-delay**

<b>Description</b>	This container defines unidirectional link delay.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay</a>
<b>Tree</b>	<a href="#">link-delay</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit</b> <i>boolean</i>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">link-delay a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>delay</b> <i>number</i>	
<b>Description</b>	Average link delay value (in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">link-delay delay</a> <i>number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-delay-variation</b>	
<b>Description</b>	This container defines unidirectional link delay variation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-delay-variation</a>
<b>Tree</b>	<a href="#">link-delay-variation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>delay number</b>	
<b>Description</b>	Average link delay between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-delay-variation delay number</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-id</b>	
<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-id</a>
<b>Tree</b>	<a href="#">link-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**local number**

<b>Description</b>	The value field of this sub-TLV contains 4 octets of Link Local Identifier followed by 4 octets of Link Remote Identifier.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-id local number</a>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote number**

<b>Description</b>	If the Link Remote Identifier is unknown, it is set to 0.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-id remote number</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-loss**

<b>Description</b>	This container defines unidirectional link loss delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-loss</a>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**a-bit** *boolean*

<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-loss a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-loss** *number*

<b>Description</b>	Link packet loss as a percentage of the total traffic sent over a configurable interval. The basic unit is 0.000003%, where $(2^{24} - 2)$ is 50.331642%. This value is the highest packet-loss percentage that can be expressed (the assumption being that precision is more important on high-speed links than the ability to advertise loss rates greater than this, and that high-speed links with over 50% loss are unusable). Therefore, measured values that are larger than the field maximum SHOULD be encoded as the maximum value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-loss link-loss</a> <i>number</i>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-protection-type**

<b>Description</b>	ISIS LSDB parameters relating to the type of link protection offered.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-protection-type</a>
<b>Tree</b>	<a href="#">link-protection-type</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type keyword</b>	
<b>Description</b>	Link protection capabilities.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref link-protection-type type keyword</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• extra-traffic If set the link has extra traffic protection. If the link is of type Extra Traffic, it means that the link is protecting another link or links. The LSPs on a link of this type will be lost if any of the links it is protecting fail.</li> <li>• unprotected If set, the link is unprotected. If the link is of type Unprotected, it means that there is no other link protecting this link. The LSPs on a link of this type will be lost if the link fails.</li> <li>• shared If set, the link has shared protection. If the link is of type Shared, it means that there are one or more disjoint links of type Extra Traffic that are protecting this link. These Extra Traffic links are shared between one or more links of type Shared.</li> <li>• one-one If set, the link has dedicated 1:1 protection. If the link is of type Dedicated 1:1, it means that there is one dedicated disjoint link of type Extra Traffic that is protecting this link.</li> <li>• plus-one If set, the link has dedicated 1+1 protection. If the link is of type Dedicated 1+1, it means that a dedicated disjoint link is protecting this link. However, the protecting link is not advertised in the link state database and is therefore not available for the routing of LSPs.</li> <li>• enhanced If set the link has enhanced protection. If the link is of type Enhanced, it means that a protection scheme that is more reliable than Dedicated 1+1, e.g., 4 fiber BLSR/MS-SPRING, is being used to protect this link.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-link-bandwidth

**Description** This container defines sub-TLV 9.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [isis-neighbor-attribute neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref](#) [max-link-bandwidth](#)

**Tree** [max-link-bandwidth](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

**Description** The maximum bandwidth that can be used on this link in this direction (from the system originating the LSP to its neighbors). It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [isis-neighbor-attribute neighbors neighbor system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref](#) [max-link-bandwidth](#) [bandwidth](#) *binary*

**Tree** [bandwidth](#)

**String Length** 4

**Units** bytes per second

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-reservable-link-bandwidth

**Description** This container defines sub-TLV 10.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#)

	<a href="#">isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref max-reservable-link-bandwidth</a>
<b>Tree</b>	<a href="#">max-reservable-link-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth <i>binary</i></b>	
<b>Description</b>	The maximum amount of bandwidth that can be reserved in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref max-reservable-link-bandwidth bandwidth <i>binary</i></a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>min-max-link-delay</b>	
<b>Description</b>	This container defines min/max link delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref min-max-link-delay</a>
<b>Tree</b>	<a href="#">min-max-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**a-bit** *boolean*

<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay a-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay** *number*

<b>Description</b>	Maximum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay min-delay</a> <i>number</i>

<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**residual-bandwidth**

<b>Description</b>	This container defines unidirectional residual bandwidth.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref residual-bandwidth</a>
<b>Tree</b>	<a href="#">residual-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth *binary***

<b>Description</b>	Residual bandwidth on a link, forwarding adjacency [RFC4206], or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, residual bandwidth is defined to be the Maximum Bandwidth [RFC5305] minus the bandwidth currently allocated to RSVP-TE label switched paths. For a bundled link, residual bandwidth is defined to be the sum of the component link residual bandwidths.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref isis-neighbor-attribute neighbors neighbor system-id string instances instance id number subtlvs subtlv type identityref residual-bandwidth bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric**

<b>Description</b>	This container defines sub-TLV 18.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">te-default-metric</a>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	This metric is administratively assigned and can be used to present a differently weighted topology to traffic engineering SPF calculations. To preclude overflow within a traffic engineering SPF implementation, all metrics greater than or equal to MAX_PATH_METRIC SHALL be considered to have a metric of MAX_PATH_METRIC.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">te-default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unconstrained-lsp**

<b>Description</b>	This container defines sub-TLV 23.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unconstrained-lsp</a>
<b>Tree</b>	<a href="#">unconstrained-lsp</a>
<b>Configurable</b>	False



<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>count</b> <i>number</i>	
<b>Description</b>	Unconstrained TE LSP count(TE Label Switched Paths (LSPs) signalled with zero bandwidth).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unconstrained-lsp count</a> <i>number</i>
<b>Tree</b>	<a href="#">count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unconstrained-lsp type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unreserved-bandwidth**

<b>Description</b>	This container defines unreserved-bandwidth. The units are bytes per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unreserved-bandwidth</a>
<b>Tree</b>	<a href="#">unreserved-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**setup-priority** *priority number*

<b>Description</b>	Enter the setup-priority list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unreserved-bandwidth</a> <a href="#">setup-priority</a> <i>priority number</i>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority** *number*

<b>Description</b>	Setup priority level of 0 through 7 to be used by Unreserved Bandwidth sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unreserved-bandwidth</a> <a href="#">setup-priority</a> <i>priority number</i>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

<b>Description</b>	The amount of bandwidth reservable in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It contains eight 32-bit IEEE floating point numbers(one for each priority). The units are bytes (not bits!) per second. The values correspond to the bandwidth that can be reserved with a setup priority of 0 through 7, arranged in increasing order with priority 0 occurring at the start of the sub-TLV, and priority 7 at the end of the sub-TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unreserved-bandwidth setup-priority</a> <i>priority</i> <i>number</i> <b>bandwidth</b> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### utilized-bandwidth

<b>Description</b>	This container defines unidirectional utilized bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <b>utilized-bandwidth</b>
<b>Tree</b>	<a href="#">utilized-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

<b>Description</b>	The bandwidth utilization on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or
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forwarding adjacency, bandwidth utilization represents the actual utilization of the link (i.e., as measured by the advertising node). For a bundled link, bandwidth utilization is defined to be the sum of the component link bandwidth utilizations.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">utilized-bandwidth bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">utilized-bandwidth type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-subtlvs**

<b>Description</b>	This container describes undefined ISIS TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-subtlv** *type number*

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs</a> <a href="#">undefined-subtlv type</a> <i>number</i>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs</a> <a href="#">undefined-subtlv type</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">isis-neighbor-attribute neighbors neighbor system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsp-buffer-size**

<b>Description</b>	This container defines TLV 14 - the LSP Buffer Size TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">lsp-buffer-size</a>
<b>Tree</b>	<a href="#">lsp-buffer-size</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size number**

<b>Description</b>	The maximum MTU that the advertising system can receive, expressed in bytes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">lsp-buffer-size size</a> <i>number</i>
<b>Tree</b>	<a href="#">size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-ipv4-reachability**

<b>Description</b>	This container defines list of IPv4 reachability Information in multi-topology environment.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability</a>
<b>Tree</b>	<a href="#">mt-ipv4-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefixes**

<b>Description</b>	This container describes IS prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes</a>
<b>Tree</b>	<a href="#">prefixes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix mt-id number prefix string**

<b>Description</b>	IPv4 prefixes that are contained within MT reachability TLV.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-id number**

<b>Description</b>	Multi-topology ID
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number prefix string</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	IPv4 prefix contained within extended reachability TLVs.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number prefix string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**metric number**

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**s-bit boolean**

<b>Description</b>	The Sub-TLV present bit. If UNSET, the octets of Sub-TLVs are not present. Otherwise, the bit is set and the octet following the prefix will contain the length of the Sub-TLV portion of the structure.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string s-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">s-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS prefix sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv** *type identityref*

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags**

<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">flags</a>

<b>Tree</b>	<a href="#">flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Additional prefix reachability flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string subtlvs subtlv type identityref flags</a> <i>flags keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>external-flag</b> External prefix flag. Set if the prefix has been redistributed from another protocol. This includes the case where multiple virtual routers are supported and the source of the redistributed prefix is another IS-IS instance.</li> <li>• <b>readvertisement-flag</b> Readvertisement flag. Set when the prefix has been leaked from one level to another (upwards or downwards).</li> <li>• <b>node-flag</b> Node flag. Set when the prefix identifies the advertising router, i.e., the prefix is a host prefix advertising a globally reachable address typically associated with a loopback address.</li> <li>• <b>elc-flag</b> Elc flag. Set for local host prefix of the originating node if it supports ELC on all interfaces</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type</b> <i>identityref</i>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref flags type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref ipv4-source-router-id</a>
<b>Tree</b>	<a href="#">ipv4-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>router-id string</b>	
<b>Description</b>	IPv4 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the ISIS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref ipv4-source-router-id router-id string</a>

<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref ipv4-source-router-id type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref ipv6-source-router-id</a>
<b>Tree</b>	<a href="#">ipv6-source-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv6 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <a href="#">identityref ipv6-source-router-id</a> <a href="#">router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <a href="#">identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <a href="#">identityref ipv6-source-router-id</a> <a href="#">type</a> <a href="#">identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sids**

<b>Description</b>	This container defines segment routing extensions for prefixes.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number</a> <a href="#">prefix string</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a>
<b>Tree</b>	<a href="#">prefix-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid** *value number*

<b>Description</b>	Prefix Segment-ID list. IGP-Prefix Segment is an IGP segment attached to an IGP prefix. An IGP-Prefix Segment is global (unless explicitly advertised otherwise) within the SR/IGP domain.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number</a> <a href="#">prefix string</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a> <a href="#">prefix-sid value number</a>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	IGP Prefix-SID value.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id number</a> <a href="#">prefix string</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids</a> <a href="#">prefix-sid value number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *number*

<b>Description</b>	Prefix-SID algorithm to be used for path computation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <b>algorithm</b> <i>number</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with Prefix Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix</a> <i>string</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids prefix-sid value</a> <i>number</i> <b>flags</b> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>readvertisement</b> Readvertisement flag. When set, the prefix to which this Prefix-SID is attached, has been propagated by the router either from another level or from redistribution.</li> <li>• <b>node</b> Node flag. When set, the Prefix-SID refers to the router identified by the prefix. Typically, the N-Flag is set on Prefix-SIDs attached to a router loopback address.</li> <li>• <b>no-php</b> Penultimate-Hop-Popping flag. When set, then the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.</li> <li>• <b>explicit-null</b> Explicit-Null flag. When set, any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID having an Explicit-NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet.</li> <li>• <b>value</b> Value flag. When set, the Prefix-SID carries a value (instead of an index). By default the flag is UNSET.</li> </ul>



	<ul style="list-style-type: none"> <li>local</li> </ul> <p>Local flag. When set, the value/index carried by the Prefix-SID has local significance. By default the flag is UNSET.</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag</b>	
<b>Description</b>	This container defines sub-TLV 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string subtlvs subtlv type identityref tag</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag32 number</b>	
<b>Description</b>	List of 32-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string subtlvs subtlv type identityref tag tag32 number</a>
<b>Tree</b>	<a href="#">tag32</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>tag64</b>	
<b>Description</b>	This container defines sub-TLV 2.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref tag64](#)

**Tree** [tag64](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag64 number

**Description** List of 64-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string subtlvs subtlv type identityref tag64 tag64 number](#)

**Tree** [tag64](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undefined-subtlvs

**Description** This container describes undefined ISIS TLVs.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv4-reachability prefixes prefix mt-id number prefix string undefined-subtlvs](#)

**Tree** [undefined-subtlvs](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-subtlv** *type number*

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-down** *boolean*

<b>Description</b>	The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv4-reachability prefixes prefix mt-id</a> <i>number</i> <a href="#">prefix string up-down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-ipv6-reachability**

<b>Description</b>	This container defines list of IPv6 reachability information in multi - topology environment.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability</a>
<b>Tree</b>	<a href="#">mt-ipv6-reachability</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefixes

**Description** This container describes IS prefixes.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes](#)

**Tree** [prefixes](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix *prefix string mt-id number*

**Description** List of IPv6 prefixes contained within MT reachability TLV.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix](#) *string mt-id number*

**Tree** [prefix](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix *string*

**Description** IPv6 prefix contained within extended reachability TLVs.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix](#) *string mt-id number*

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mt-id *number*

<b>Description</b>	Multi-topology ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### metric *number*

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### s-bit *boolean*

<b>Description</b>	The sub-tlv present bit. If UNSET, the octets of Sub-TLVs are not present. Otherwise, the bit is set and the octet following the prefix will contain the length of the Sub-TLV portion of the structure.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">s-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">s-bit</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subtlvs

**Description** This container describes IS prefix sub-TLVs.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs](#)

**Tree** [subtlvs](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subtlv [type identityref](#)

**Description** List of subTLV types in the LSDB for the specified TLV.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs subtlv type identityref](#)

**Tree** [subtlv](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [type identityref](#)

**Description** The type of subTLV being described. The type of subTLV is expressed as a canonical name.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs subtlv type identityref](#)

**Options**

- [is-reachability-subtlvs-type](#)  
Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.

- **ip-reachability-subtlvs-type**  
Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.
- **router-capability-subtlvs-type**  
Base identity for an ISIS TLV 242 SUB-TLV type.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags****Description**

This container defines sub-TLV 4.

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs subtlv type identityref flags](#)

**Tree**[flags](#)**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags keyword****Description**

Additional prefix reachability flags.

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs subtlv type identityref flags flags keyword](#)

**Tree**[flags](#)**Options**

- **external-flag**  
External prefix flag. Set if the prefix has been redistributed from another protocol. This includes the case where multiple virtual routers are supported and the source of the redistributed prefix is another IS-IS instance.
- **readvertisement-flag**  
Readvertisement flag. Set when the prefix has been leaked from one level to another (upwards or downwards).
- **node-flag**



	<p>Node flag. Set when the prefix identifies the advertising router, i.e., the prefix is a host prefix advertising a globally reachable address typically associated with a loopback address.</p> <ul style="list-style-type: none"> <li>• elc-flag</li> </ul> <p>Elc flag. Set for local host prefix of the originating node if it supports ELC on all interfaces</p>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix string mt-id number subtlvs subtlv type identityref flags type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• is-reachability-subtlvs-type Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• ip-reachability-subtlvs-type Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• router-capability-subtlvs-type Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-source-router-id</b>	
<b>Description</b>	This container defines sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix string mt-id number subtlvs subtlv type identityref ipv4-source-router-id</a>
<b>Tree</b>	<a href="#">ipv4-source-router-id</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>router-id string</b>	
<b>Description</b>	IPv4 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix string</a> <a href="#">mt-id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-source-router-id router-id string</a>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix string</a> <a href="#">mt-id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-source-router-id type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-source-router-id

**Description** This container defines sub-TLV 12.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix string](#) [mt-id number](#) [subtlvs subtlv type identityref](#) [ipv6-source-router-id](#)

**Tree** [ipv6-source-router-id](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### router-id string

**Description** IPv6 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix string](#) [mt-id number](#) [subtlvs subtlv type identityref](#) [ipv6-source-router-id](#) [router-id string](#)

**Tree** [router-id](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### type identityref

**Description** The type of subTLV being described. The type of subTLV is expressed as a canonical name.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv6-source-router-id</a> <i>type</i> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>prefix-sids</b>	
<b>Description</b>	This container defines segment routing extensions for prefixes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids</a>
<b>Tree</b>	<a href="#">prefix-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>prefix-sid</b> <a href="#">value</a> <i>number</i>	
<b>Description</b>	Prefix Segment-ID list. IGP-Prefix Segment is an IGP segment attached to an IGP prefix. An IGP-Prefix Segment is global (unless explicitly advertised otherwise) within the SR/IGP domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">prefix-sids</a> <a href="#">prefix-sid</a> <a href="#">value</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-sid</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value number</b>	
<b>Description</b>	IGP Prefix-SID value.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix string</a> <a href="#">mt-id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>algorithm number</b>	
<b>Description</b>	Prefix-SID algorithm to be used for path computation.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix string</a> <a href="#">mt-id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value number</a> <a href="#">algorithm number</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags keyword</b>	
<b>Description</b>	Flags associated with Prefix Segment-ID.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix string</a> <a href="#">mt-id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">prefix-sids prefix-sid value number</a> <a href="#">flags keyword</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• readvertisement</li> </ul>

Readvertisement flag. When set, the prefix to which this Prefix-SID is attached, has been propagated by the router either from another level or from redistribution.

- node

Node flag. When set, the Prefix-SID refers to the router identified by the prefix. Typically, the N-Flag is set on Prefix-SIDs attached to a router loopback address.

- no-php

Penultimate-Hop-Popping flag. When set, then the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.

- explicit-null

Explicit-Null flag. When set, any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID having an Explicit-NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet.

- value

Value flag. When set, the Prefix-SID carries a value (instead of an index). By default the flag is UNSET.

- local

Local flag. When set, the value/index carried by the Prefix-SID has local significance. By default the flag is UNSET.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag**

**Description**

This container defines sub-TLV 1.

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [subtlvs subtlv type identityref tag](#)

**Tree**

[tag](#)

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag32** *number*

<b>Description</b>	List of 32-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref tag tag32</a> <i>number</i>
<b>Tree</b>	<a href="#">tag32</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag64**

<b>Description</b>	This container defines sub-TLV 2.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref tag64</a>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag64** *number*

<b>Description</b>	List of 64-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref tag64 tag64</a> <i>number</i>
<b>Tree</b>	<a href="#">tag64</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## undefined-subtlvs

**Description** This container describes undefined ISIS TLVs.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [undefined-subtlvs](#)

**Tree** [undefined-subtlvs](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## undefined-subtlv *type number*

**Description** Sub-TLVs that are not defined in the model or not recognised by system.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [undefined-subtlvs](#) [undefined-subtlv type](#) *number*

**Tree** [undefined-subtlv](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## *type number*

**Description** TLV Type.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [mt-ipv6-reachability prefixes prefix prefix](#) *string* [mt-id](#) *number* [undefined-subtlvs](#) [undefined-subtlv type](#) *number*

**Configurable** False



<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>length</b> <i>number</i>	
<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <i>binary</i>	
<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-ipv6-reachability prefixes prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>up-down</b> <i>boolean</i>	
<b>Description</b>	The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">up-down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">up-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**x-bit** *boolean*

<b>Description</b>	The external bit. Set when the prefix was distributed into IS-IS from another routing protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-ipv6-reachability prefixes prefix prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i> <a href="#">x-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">x-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-isis-neighbor-attribute**

<b>Description</b>	This container defines list of ISIS multi-topology neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute</a>
<b>Tree</b>	<a href="#">mt-isis-neighbor-attribute</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbors**

<b>Description</b>	MT-IS neighbor attributes.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** *mt-id* *number* *system-id* *string*

<b>Description</b>	This container describes IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mt-id** *number*

<b>Description</b>	Identifier of a topology being announced.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-id** *string*

<b>Description</b>	System-id of the IS neighbor.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instances

<b>Description</b>	This list contains all instances of an adjacency between the originating and remote IS. Multiple instances are used to indicate where there are arallel adjacencies between systems.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a>
<b>Tree</b>	<a href="#">instances</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instance *id number*

<b>Description</b>	Instance of TLV-222 between the originating and remote IS.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	Unique identifier for the TLV instance for the neighbor. The ID is not required to be consistent across readvertisements of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS Neighbor sub-TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv type identityref**

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type identityref**

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>is-reachability-subtlvs-type Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>ip-reachability-subtlvs-type Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>router-capability-subtlvs-type Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sids**

<b>Description</b>	This container defines segment routing adjacency SIDs.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">adjacency-sids</a>

<b>Tree</b>	<a href="#">adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sid** *value number*

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid</a> <i>value number</i>
<b>Tree</b>	<a href="#">adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref adjacency-sids adjacency-sid</a> <i>value number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a>

	<a href="#">mt-isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">adjacency-sids</a> <a href="#">adjacency-sid</a> <i>value</i> <a href="#">number</a> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">address-family</a> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <a href="#">backup</a> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <a href="#">value</a> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> <li>• <a href="#">local</a> Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</li> <li>• <a href="#">set</a> Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight</b> <i>number</i>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <i>name</i> <i>string</i> <a href="#">level</a> <a href="#">level-number</a> <i>number</i> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">tlvs</a> <a href="#">tlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">mt-isis-neighbor-attribute</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <i>number</i> <a href="#">subtlvs</a> <a href="#">subtlv</a> <i>type</i> <a href="#">identityref</a> <a href="#">adjacency-sids</a> <a href="#">adjacency-sid</a> <i>value</i> <a href="#">number</a> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**admin-group**

<b>Description</b>	This container defines sub-TLV 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">admin-group</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group number**

<b>Description</b>	The administrative group sub-TLV contains a 4-octet bit mask assigned by the network administrator  Each set bit corresponds to one administrative group assigned to the interface. By convention, the least significant bit is referred to as group 0, and the most significant bit is referred to as group 31.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">admin-group admin-group number</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**application-specific-link-attributes**

<b>Description</b>	Application Specific Link Attributes. Sub-TLV = 16.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes</a>
<b>Tree</b>	<a href="#">application-specific-link-attributes</a>
<b>Configurable</b>	False

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>legacy</b> <i>boolean</i>	
<b>Description</b>	When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLVs 22, 23, 25, 141, 222, and 223, in TLV 138, or in TLV 139 as appropriate.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes legacy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>loop-free-alternate</b> <i>boolean</i>	
<b>Description</b>	F bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes loop-free-alternate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">loop-free-alternate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>rsvp-te</b> <i>boolean</i>	
<b>Description</b>	R bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes rsvp-te</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rsvp-te</a>
<b>Configurable</b>	False

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>sr-policy</b> <i>boolean</i>	
<b>Description</b>	S bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes sr-policy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sr-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>sub-sub-tlvs</b>	
<b>Description</b>	Enter the sub-sub-tlvs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes sub-sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>admin-group</b> <i>number</i>	
<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-Sub-TLV = 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes sub-sub-tlvs admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-link-bandwidth** *number*

<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-Sub-TLV = 9.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs maximum-link-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-max-unidirectional-link-delay**

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anomolous** *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay anomolous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomolous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay** *number*

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>

<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available-bandwidth**

<b>Description</b>	This container defines unidirectional lavailable bandwidth.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref available-bandwidth</a>
<b>Tree</b>	<a href="#">available-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth *binary***

<b>Description</b>	The available bandwidth on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, available bandwidth is defined to be residual bandwidth minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref available-bandwidth bandwidth <i>binary</i></a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bandwidth-constraints**

<b>Description</b>	This container defines bandwidth-constraints. For DS-TE, the existing Maximum Reservable link bandwidth parameter is retained, but its semantics is generalized and interpreted as the aggregate bandwidth constraint across all Class-Types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints</a>
<b>Tree</b>	<a href="#">bandwidth-constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth-constraint** *model-id number*

<b>Description</b>	List of the Bandwidth Constraints sub-TLV instances present in the TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i>
<b>Tree</b>	<a href="#">bandwidth-constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**model-id** *number*

<b>Description</b>	Identifier for the Bandwidth Constraints Model currently in use by the LSR initiating the IGP advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**constraints**

<b>Description</b>	Constraints contained within the Bandwidth Constraints sub-TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints</a>
<b>Tree</b>	<a href="#">constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **constraint** *constraint-id number*

<b>Description</b>	List of the constraints within the Bandwidth Constraints sub-TLV. The BC0 level is indicated by the constraint-id leaf being set to 0, with BCN being indicated by constraint-id N.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">bandwidth-constraints bandwidth-constraint model-id number</a> <a href="#">constraints constraint constraint-id number</a>
<b>Tree</b>	<a href="#">constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **constraint-id** *number*

<b>Description</b>	Unique reference for the bandwidth constraint level. BC0 is indicated by this leaf being set to zero, with BCN represented by this leaf being set to N.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">bandwidth-constraints bandwidth-constraint model-id number</a> <a href="#">constraints constraint constraint-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bandwidth** *binary*

<b>Description</b>	The bandwidth constraint, expressed as a 32-bit IEEE floating point number expressed in bytes per second.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">bandwidth-</a>

	<a href="#">constraints bandwidth-constraint model-id number constraints constraint constraint-id number bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>extended-admin-group</b>	
<b>Description</b>	This container defines sub-TLV 14.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref extended-admin-group</a>
<b>Tree</b>	<a href="#">extended-admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>extended-admin-group number</b>	
<b>Description</b>	The extended-admin-group sub-TLV is used in addition to the Administrative Groups when it is desirable to make more than 32 colors available for advertisement in a network.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref extended-admin-group extended-admin-group number</a>
<b>Tree</b>	<a href="#">extended-admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-interface-address**

<b>Description</b>	This container defines sub-TLV 6.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-interface-address</a>
<b>Tree</b>	<a href="#">ipv4-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	A 4-octet IPv4 address for the interface described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-interface-address address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-neighbor-address**

<b>Description</b>	This container defines sub-TLV 8.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">ipv4-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	A single IPv4 address for a neighboring router on this link. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv4-neighbor-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-interface-address

<b>Description</b>	This container defines sub-TLV 12.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-interface-address address</a>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	Contains a 16-octet IPv6 address for the interface described by the containing Extended IS Reachability TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-interface-address address string</a>

<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-neighbor-address**

<b>Description</b>	This container defines sub-TLV 13.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv6-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Contains a 16-octet IPv6 address for a neighboring router on the link described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv6-neighbor-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-adjacency-sids**

<b>Description</b>	This container defines segment routing LAN adjacency SIDs
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref</a>

	<a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref lan-adjacency-sids</a>
<b>Tree</b>	<a href="#">lan-adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>lan-adjacency-sid</b> <a href="#">value number</a>	
<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value number</a>
<b>Tree</b>	<a href="#">lan-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <a href="#">number</a>	
<b>Description</b>	LAN Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Flags associated with LAN-Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <b>flags</b> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>address-family</b> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <b>backup</b> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <b>value</b> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> <li>• <b>local</b> Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</li> <li>• <b>set</b> Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-id** *string*

<b>Description</b>	System ID of the neighbor associated with the LAN- Adj-Segment-ID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">neighbor-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-id</a>
<b>String Length</b>	14

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight number</b>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">lan-adjacency-sids lan-adjacency-sid value number</a> <b>weight number</b>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-attributes</b>	
<b>Description</b>	This container defines link-attributes.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <b>link-attributes</b>
<b>Tree</b>	<a href="#">link-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>local-protection keyword</b>	
<b>Description</b>	Link local-protection attributes.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">link-attributes</a> <b>local-protection keyword</b>



<b>Tree</b>	<a href="#">local-protection</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">local-protection</a> If set, local protection is available for the link.</li> <li>• <a href="#">link-excluded</a> If set, the link is excluded from local protection.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-delay</b>	
<b>Description</b>	This container defines unidirectional link delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay</a>
<b>Tree</b>	<a href="#">link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit <i>boolean</i></b>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay** *number*

<b>Description</b>	Average link delay value (in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay</a> <i>delay number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-delay-variation**

<b>Description</b>	This container defines unidirectional link delay variation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay-variation</a>
<b>Tree</b>	<a href="#">link-delay-variation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay** *number*

<b>Description</b>	Average link delay between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-delay-variation</a> <a href="#">delay</a> <i>number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-id</b>	
<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-id</a>
<b>Tree</b>	<a href="#">link-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>local number</b>	
<b>Description</b>	The value field of this sub-TLV contains 4 octets of Link Local Identifier followed by 4 octets of Link Remote Identifier.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-id local number</a>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>remote number</b>	
<b>Description</b>	If the Link Remote Identifier is unknown, it is set to 0.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref link-id remote number</a>

<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-loss**

<b>Description</b>	This container defines unidirectional link loss delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss</a>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**a-bit *boolean***

<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-loss *number***

<b>Description</b>	Link packet loss as a percentage of the total traffic sent over a configurable interval. The basic unit is 0.000003%, where $(2^{24} - 2)$ is 50.331642%. This value is the highest packet-loss percentage that can be expressed (the assumption being that precision is more important on high-speed links than
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the ability to advertise loss rates greater than this, and that high- speed links with over 50% loss are unusable). Therefore, measured values that are larger than the field maximum SHOULD be encoded as the maximum value.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss link-loss number](#)

**Tree** [link-loss](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## link-protection-type

**Description** ISIS LSDB parameters relating to the type of link protection offered.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-protection-type](#)

**Tree** [link-protection-type](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## type keyword

**Description** Link protection capabilities.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-protection-type type keyword](#)

**Tree** [type](#)

**Options**

- extra-traffic

If set the link has extra traffic protection. If the link is of type Extra Traffic, it means that the link is protecting another link or links. The LSPs on a link of this type will be lost if any of the links it is protecting fail.

- **unprotected**  
If set, the link is unprotected. If the link is of type Unprotected, it means that there is no other link protecting this link. The LSPs on a link of this type will be lost if the link fails.
- **shared**  
If set, the link has shared protection. If the link is of type Shared, it means that there are one or more disjoint links of type Extra Traffic that are protecting this link. These Extra Traffic links are shared between one or more links of type Shared.
- **one-one**  
If set, the link has dedicated 1:1 protection. If the link is of type Dedicated 1:1, it means that there is one dedicated disjoint link of type Extra Traffic that is protecting this link.
- **plus-one**  
If set, the link has dedicated 1+1 protection. If the link is of type Dedicated 1+1, it means that a dedicated disjoint link is protecting this link. However, the protecting link is not advertised in the link state database and is therefore not available for the routing of LSPs.
- **enhanced**  
If set the link has enhanced protection. If the link is of type Enhanced, it means that a protection scheme that is more reliable than Dedicated 1+1, e.g., 4 fiber BLSR/MS-SPRING, is being used to protect this link.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-link-bandwidth****Description**

This container defines sub-TLV 9.

**Context**

[network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id](#) *number* [system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type identityref max-link-bandwidth](#)

**Tree**[max-link-bandwidth](#)**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The maximum bandwidth that can be used on this link in this direction (from the system originating the LSP to its neighbors). It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-link-bandwidth bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-reservable-link-bandwidth**

<b>Description</b>	This container defines sub-TLV 10.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-reservable-link-bandwidth</a>
<b>Tree</b>	<a href="#">max-reservable-link-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The maximum amount of bandwidth that can be reserved in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i>

	<a href="#">instances instance id number subtlvs subtlv type identityref max-reservable-link-bandwidth bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>min-max-link-delay</b>	
<b>Description</b>	This container defines min/max link delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref min-max-link-delay</a>
<b>Tree</b>	<a href="#">min-max-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit <i>boolean</i></b>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref min-max-link-delay a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**max-delay** *number*

<b>Description</b>	Maximum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">min-max-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">min-max-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**residual-bandwidth**

<b>Description</b>	This container defines unidirectional residual bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">residual-bandwidth</a>
<b>Tree</b>	<a href="#">residual-bandwidth</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth <i>binary</i></b>	
<b>Description</b>	Residual bandwidth on a link, forwarding adjacency [RFC4206], or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, residual bandwidth is defined to be the Maximum Bandwidth [RFC5305] minus the bandwidth currently allocated to RSVP-TE label switched paths. For a bundled link, residual bandwidth is defined to be the sum of the component link residual bandwidths.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref residual-bandwidth bandwidth <i>binary</i></a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>te-default-metric</b>	
<b>Description</b>	This container defines sub-TLV 18.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref te-default-metric</a>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	This metric is administratively assigned and can be used to present a differently weighted topology to traffic engineering SPF calculations. To preclude overflow within a traffic engineering SPF implementation, all metrics greater than or equal to MAX_PATH_METRIC SHALL be considered to have a metric of MAX_PATH_METRIC.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">te-default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unconstrained-lsp**

<b>Description</b>	This container defines sub-TLV 23.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unconstrained-lsp</a>
<b>Tree</b>	<a href="#">unconstrained-lsp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**count number**

<b>Description</b>	Unconstrained TE LSP count(TE Label Switched Paths (LSPs) signalled with zero bandwidth).
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unconstrained-lsp count number</a>
<b>Tree</b>	<a href="#">count</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unconstrained-lsp type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>unreserved-bandwidth</b>	
<b>Description</b>	This container defines unreserved-bandwidth. The units are bytes per second.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth</a>
<b>Tree</b>	<a href="#">unreserved-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### setup-priority *priority number*

<b>Description</b>	Enter the setup-priority list instance
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unreserved-bandwidth setup-priority priority number</a>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority *number*

<b>Description</b>	Setup priority level of 0 through 7 to be used by Unreserved Bandwidth sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">unreserved-bandwidth setup-priority priority number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

<b>Description</b>	The amount of bandwidth reservable in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It contains eight 32-bit IEEE floating point numbers(one for each priority). The units are bytes (not bits!) per second. The values correspond to the bandwidth that can be reserved with a setup priority of 0 through 7, arranged in increasing order with priority 0 occurring at the start of the sub-TLV, and priority 7 at the end of the sub-TLV.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a>

	<a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth setup-priority priority number bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>utilized-bandwidth</b>	
<b>Description</b>	This container defines unidirectional utilized bandwidth.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth</a>
<b>Tree</b>	<a href="#">utilized-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth <i>binary</i></b>	
<b>Description</b>	The bandwidth utilization on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, bandwidth utilization represents the actual utilization of the link (i.e., as measured by the advertising node). For a bundled link, bandwidth utilization is defined to be the sum of the component link bandwidth utilizations.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>undefined-subtlvs</b>	
<b>Description</b>	This container describes undefined ISIS TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-subtlv** *type number*

<b>Description</b>	Sub-TLVs that are not defined in the model or not recognised by system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Tree</b>	<a href="#">undefined-subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isis-neighbor-attribute neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">undefined-subtlvs undefined-subtlv type</a> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-Isn**

<b>Description</b>	This container defines list of ISIS multi-topology neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-Isn</a>
<b>Tree</b>	<a href="#">mt-Isn</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbors**

<b>Description</b>	MT-IS neighbor attributes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-Isn neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** *mt-id number system-id string*

<b>Description</b>	This container describes IS neighbors.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number system-id string</a>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-id** *number*

<b>Description</b>	Identifier of a topology being announced.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number system-id string</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-id** *string*

<b>Description</b>	System-id of the IS neighbor.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number system-id string</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instances

<b>Description</b>	This list contains all instances of an adjacency between the originating and remote IS. Multiple instances are used to indicate where there are parallel adjacencies between systems.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances</a>
<b>Tree</b>	<a href="#">instances</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instance *id number*

<b>Description</b>	Instance of TLV-222 between the originating and remote IS.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id number</a>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## *id number*

<b>Description</b>	Unique identifier for the TLV instance for the neighbor. The ID is not required to be consistent across readvertisements of the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric number**

<b>Description</b>	ISIS metric value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlvs**

<b>Description</b>	This container describes IS Neighbor sub-TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs</a>
<b>Tree</b>	<a href="#">subtlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtlv type identityref**

<b>Description</b>	List of subTLV types in the LSDB for the specified TLV.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref</a>
<b>Tree</b>	<a href="#">subtlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sids**

<b>Description</b>	This container defines segment routing adjacency SIDs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">adjacency-sids</a>
<b>Tree</b>	<a href="#">adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency-sid** *value number*

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>

	<a href="#">mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids adjacency-sid value number</a>
<b>Tree</b>	<a href="#">adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b>	<i>number</i>
<b>Description</b>	Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids adjacency-sid value number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b>	<i>keyword</i>
<b>Description</b>	Flags associated with Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids adjacency-sid value number flags keyword</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>address-family</b> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <b>backup</b> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <b>value</b> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> </ul>

	<ul style="list-style-type: none"> <li>local Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</li> <li>set Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight number</b>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref adjacency-sids adjacency-sid value number weight number</a>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>admin-group</b>	
<b>Description</b>	This container defines sub-TLV 3.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref admin-group</a>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group** *number*

<b>Description</b>	The administrative group sub-TLV contains a 4-octet bit mask assigned by the network administrator  Each set bit corresponds to one administrative group assigned to the interface. By convention, the least significant bit is referred to as group 0, and the most significant bit is referred to as group 31.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref admin-group admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**application-specific-link-attributes**

<b>Description</b>	Application Specific Link Attributes. Sub-TLV = 16.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes</a>
<b>Tree</b>	<a href="#">application-specific-link-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**legacy** *boolean*

<b>Description</b>	When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLVs 22, 23, 25, 141, 222, and 223, in TLV 138, or in TLV 139 as appropriate.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref application-specific-link-attributes legacy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### loop-free-alternate *boolean*

**Description** F bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [mt-isn neighbors neighbor mt-id](#) *number* [system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes loop-free-alternate](#) *boolean*

**Tree** [loop-free-alternate](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rsvp-te *boolean*

**Description** R bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [mt-isn neighbors neighbor mt-id](#) *number* [system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes rsvp-te](#) *boolean*

**Tree** [rsvp-te](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-policy *boolean*

**Description** S bit is set in the Standard Application Identifier Bit Mask

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [mt-isn neighbors neighbor mt-id](#) *number* [system-id](#) *string* [instances instance id](#) *number* [subtlvs subtlv type](#) *identityref* [application-specific-link-attributes sr-policy](#) *boolean*

**Tree** [sr-policy](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sub-sub-tlvs**

<b>Description</b>	Enter the sub-sub-tlvs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group** *number*

<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-Sub-TLV = 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-link-bandwidth** *number*

<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-Sub-TLV = 9.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs maximum-link-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-max-unidirectional-link-delay**

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anomolous** *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay anomolous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomolous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay** *number*

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">application-specific-link-attributes sub-sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available-bandwidth**

<b>Description</b>	This container defines unidirectional lavailable bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth</a>
<b>Tree</b>	<a href="#">available-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bandwidth** *binary*

<b>Description</b>	The available bandwidth on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, available bandwidth is defined to be residual bandwidth minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths minus the measured bandwidth used for the actual forwarding of non-RSVP-TE label switched path packets. For a bundled link, available bandwidth is defined to be the sum of the component link available bandwidths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth</a> <i>bandwidth binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">available-bandwidth type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>is-reachability-subtlvs-type Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>ip-reachability-subtlvs-type Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>router-capability-subtlvs-type</li> </ul>

Base identity for an ISIS TLV 242 SUB-TLV type.

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth-constraints

<b>Description</b>	This container defines bandwidth-constraints. For DS-TE, the existing Maximum Reservable link bandwidth parameter is retained, but its semantics is generalized and interpreted as the aggregate bandwidth constraint across all Class-Types
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints</a>
<b>Tree</b>	<a href="#">bandwidth-constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth-constraint [model-id number](#)

<b>Description</b>	List of the Bandwidth Constraints sub-TLV instances present in the TLV.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number</a>
<b>Tree</b>	<a href="#">bandwidth-constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [model-id number](#)

<b>Description</b>	Identifier for the Bandwidth Constraints Model currently in use by the LSR initiating the IGP advertisement.
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<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>constraints</b>	
<b>Description</b>	Constraints contained within the Bandwidth Constraints sub-TLV
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number constraints</a>
<b>Tree</b>	<a href="#">constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>constraint <a href="#">constraint-id number</a></b>	
<b>Description</b>	List of the constraints within the Bandwidth Constraints sub-TLV. The BC0 level is indicated by the constraint-id leaf being set to 0, with BCN being indicated by constraint-id N.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref bandwidth-constraints bandwidth-constraint model-id number constraints constraint constraint-id number</a>
<b>Tree</b>	<a href="#">constraint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**constraint-id** *number*

<b>Description</b>	Unique reference for the bandwidth constraint level. BC0 is indicated by this leaf being set to zero, with BCN represented by this leaf being set to N.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The bandwidth constraint, expressed as a 32-bit IEEE floating point number expressed in bytes per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">bandwidth-constraints bandwidth-constraint model-id</a> <i>number</i> <a href="#">constraints constraint constraint-id</a> <i>number</i> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-admin-group**

<b>Description</b>	This container defines sub-TLV 14.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">extended-admin-group</a>
<b>Tree</b>	<a href="#">extended-admin-group</a>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### extended-admin-group *number*

**Description** The extended-admin-group sub-TLV is used in addition to the Administrative Groups when it is desirable to make more than 32 colors available for advertisement in a network.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref extended-admin-group extended-admin-group number](#)

**Tree** [extended-admin-group](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### ipv4-interface-address

**Description** This container defines sub-TLV 6.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv4-interface-address](#)

**Tree** [ipv4-interface-address](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### address *string*

**Description** A 4-octet IPv4 address for the interface described by the (main) TLV. This sub-TLV can occur multiple times.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance](#)

	<a href="#">id number</a> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">ipv4-interface-address</a> <a href="#">address</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv4-neighbor-address</b>	
<b>Description</b>	This container defines sub-TLV 8.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <a href="#">string</a> <a href="#">level</a> <a href="#">level-number</a> <a href="#">number</a> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <a href="#">string</a> <a href="#">tlvs</a> <a href="#">tlv type</a> <a href="#">identityref</a> <a href="#">mt-isn</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">mt-id</a> <a href="#">number</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <a href="#">number</a> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">ipv4-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>address</b> <a href="#">string</a>	
<b>Description</b>	A single IPv4 address for a neighboring router on this link. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance name</a> <a href="#">string</a> <a href="#">level</a> <a href="#">level-number</a> <a href="#">number</a> <a href="#">link-state-database</a> <a href="#">lsp</a> <a href="#">lsp-id</a> <a href="#">string</a> <a href="#">tlvs</a> <a href="#">tlv type</a> <a href="#">identityref</a> <a href="#">mt-isn</a> <a href="#">neighbors</a> <a href="#">neighbor</a> <a href="#">mt-id</a> <a href="#">number</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">instances</a> <a href="#">instance</a> <a href="#">id</a> <a href="#">number</a> <a href="#">subtlvs</a> <a href="#">subtlv type</a> <a href="#">identityref</a> <a href="#">ipv4-neighbor-address</a> <a href="#">address</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-interface-address</b>	
<b>Description</b>	This container defines sub-TLV 12.

<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv6-interface-address</a>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>address string</b>	
<b>Description</b>	Contains a 16-octet IPv6 address for the interface described by the containing Extended IS Reachability TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv6-interface-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>ipv6-neighbor-address</b>	
<b>Description</b>	This container defines sub-TLV 13.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref ipv6-neighbor-address</a>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Contains a 16-octet IPv6 address for a neighboring router on the link described by the (main) TLV. This sub-TLV can occur multiple times.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">ipv6-neighbor-address address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-adjacency-sids**

<b>Description</b>	This container defines segment routing LAN adjacency SIDs
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">lan-adjacency-sids</a>
<b>Tree</b>	<a href="#">lan-adjacency-sids</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-adjacency-sid value number**

<b>Description</b>	Adjacency Segment-IDs List. An IGP-Adjacency Segment is an IGP segment attached to a unidirectional adjacency or a set of unidirectional adjacencies. By default, an IGP- Adjacency Segment is local to the node which advertises it.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">lan-adjacency-sids lan-adjacency-sid value number</a>
<b>Tree</b>	<a href="#">lan-adjacency-sid</a>
<b>Configurable</b>	False

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>value</b> <i>number</i>	
<b>Description</b>	LAN Adjacency-SID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>flags</b> <i>keyword</i>	
<b>Description</b>	Flags associated with LAN-Adj-Segment-ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>address-family</b> Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.</li> <li>• <b>backup</b> Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).</li> <li>• <b>value</b> Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.</li> <li>• <b>local</b> Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.</li> <li>• <b>set</b></li> </ul>

Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>neighbor-id</b> <i>string</i>	
<b>Description</b>	System ID of the neighbor associated with the LAN- Adj-Segment-ID value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">neighbor-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>weight</b> <i>number</i>	
<b>Description</b>	Value that represents the weight of the Adj-SID for the purpose of load balancing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref lan-adjacency-sids lan-adjacency-sid value</a> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-attributes</b>	
<b>Description</b>	This container defines link-attributes.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [mt-isn neighbors neighbor mt-id number](#) [system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [link-attributes](#)

**Tree** [link-attributes](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-protection *keyword*

**Description** Link local-protection attributes.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [mt-isn neighbors neighbor mt-id number](#) [system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [link-attributes](#) [local-protection keyword](#)

**Tree** [local-protection](#)

**Options**

- local-protection  
If set, local protection is available for the link.
- link-excluded  
If set, the link is excluded from local protection.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-delay

**Description** This container defines unidirectional link delay.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [level level-number number](#) [link-state-database lsp lsp-id string](#) [tlvs tlv type identityref](#) [mt-isn neighbors neighbor mt-id number](#) [system-id string](#) [instances instance id number](#) [subtlvs subtlv type identityref](#) [link-delay](#)

**Tree** [link-delay](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **a-bit** *boolean*

<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delay** *number*

<b>Description</b>	Average link delay value (in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay delay number</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **link-delay-variation**

<b>Description</b>	This container defines unidirectional link delay variation.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay-variation</a>
<b>Tree</b>	<a href="#">link-delay-variation</a>



<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>delay number</b>	
<b>Description</b>	Average link delay between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-delay-variation delay number</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-id</b>	
<b>Description</b>	This container defines sub-TLV 4.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-id</a>
<b>Tree</b>	<a href="#">link-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>local number</b>	
<b>Description</b>	The value field of this sub-TLV contains 4 octets of Link Local Identifier followed by 4 octets of Link Remote Identifier.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref</a>

	<a href="#">mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-id local number</a>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>remote number</b>	
<b>Description</b>	If the Link Remote Identifier is unknown, it is set to 0.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-id remote number</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-loss</b>	
<b>Description</b>	This container defines unidirectional link loss delay.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss</a>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit boolean</b>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.

<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-loss number</b>	
<b>Description</b>	Link packet loss as a percentage of the total traffic sent over a configurable interval. The basic unit is 0.000003%, where (2 <sup>24</sup> - 2) is 50.331642%. This value is the highest packet-loss percentage that can be expressed (the assumption being that precision is more important on high-speed links than the ability to advertise loss rates greater than this, and that high-speed links with over 50% loss are unusable). Therefore, measured values that are larger than the field maximum SHOULD be encoded as the maximum value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-loss link-loss number</a>
<b>Tree</b>	<a href="#">link-loss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>link-protection-type</b>	
<b>Description</b>	ISIS LSDB parameters relating to the type of link protection offered.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref link-protection-type</a>
<b>Tree</b>	<a href="#">link-protection-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Link protection capabilities.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">link-protection-type</a> <i>type</i> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>extra-traffic</b> If set the link has extra traffic protection. If the link is of type Extra Traffic, it means that the link is protecting another link or links. The LSPs on a link of this type will be lost if any of the links it is protecting fail.</li> <li>• <b>unprotected</b> If set, the link is unprotected. If the link is of type Unprotected, it means that there is no other link protecting this link. The LSPs on a link of this type will be lost if the link fails.</li> <li>• <b>shared</b> If set, the link has shared protection. If the link is of type Shared, it means that there are one or more disjoint links of type Extra Traffic that are protecting this link. These Extra Traffic links are shared between one or more links of type Shared.</li> <li>• <b>one-one</b> If set, the link has dedicated 1:1 protection. If the link is of type Dedicated 1:1, it means that there is one dedicated disjoint link of type Extra Traffic that is protecting this link.</li> <li>• <b>plus-one</b> If set, the link has dedicated 1+1 protection. If the link is of type Dedicated 1+1, it means that a dedicated disjoint link is protecting this link. However, the protecting link is not advertised in the link state database and is therefore not available for the routing of LSPs.</li> <li>• <b>enhanced</b> If set the link has enhanced protection. If the link is of type Enhanced, it means that a protection scheme that is more reliable than Dedicated 1+1, e.g., 4 fiber BLSR/MS-SPRING, is being used to protect this link.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-link-bandwidth**

<b>Description</b>	This container defines sub-TLV 9.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-link-bandwidth</a>
<b>Tree</b>	<a href="#">max-link-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bandwidth** *binary*

<b>Description</b>	The maximum bandwidth that can be used on this link in this direction (from the system originating the LSP to its neighbors). It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-link-bandwidth</a> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-reservable-link-bandwidth**

<b>Description</b>	This container defines sub-TLV 10.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">max-reservable-link-bandwidth</a>
<b>Tree</b>	<a href="#">max-reservable-link-bandwidth</a>
<b>Configurable</b>	False

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <i>binary</i>	
<b>Description</b>	The maximum amount of bandwidth that can be reserved in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It is encoded in 32 bits in IEEE floating point format. The units are bytes (not bits!) per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref max-reservable-link-bandwidth</a> <i>bandwidth</i> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>min-max-link-delay</b>	
<b>Description</b>	This container defines min/max link delay.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type identityref min-max-link-delay</a>
<b>Tree</b>	<a href="#">min-max-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>a-bit</b> <i>boolean</i>	
<b>Description</b>	The A bit is set when the measured value of this parameter exceeds its configured maximum threshold. The A bit is cleared when the measured value falls below its configured reuse threshold.

<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">min-max-link-delay a-bit boolean</a>
<b>Tree</b>	<a href="#">a-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>max-delay number</b>	
<b>Description</b>	Maximum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">min-max-link-delay max-delay number</a>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>min-delay number</b>	
<b>Description</b>	Minimum measured link delay value(in microseconds) between two directly connected IS-IS neighbors over a configurable interval.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols isis instance name string</a> <a href="#">level level-number number</a> <a href="#">link-state-database lsp lsp-id string</a> <a href="#">tlvs tlv type identityref</a> <a href="#">mt-isn neighbors neighbor mt-id number</a> <a href="#">system-id string</a> <a href="#">instances instance id number</a> <a href="#">subtlvs subtlv type identityref</a> <a href="#">min-max-link-delay min-delay number</a>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### residual-bandwidth

<b>Description</b>	This container defines unidirectional residual bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">residual-bandwidth</a>
<b>Tree</b>	<a href="#">residual-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bandwidth *binary*

<b>Description</b>	Residual bandwidth on a link, forwarding adjacency [RFC4206], or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, residual bandwidth is defined to be the Maximum Bandwidth [RFC5305] minus the bandwidth currently allocated to RSVP-TE label switched paths. For a bundled link, residual bandwidth is defined to be the sum of the component link residual bandwidths.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">residual-bandwidth</a> <a href="#">bandwidth</a> <i>binary</i>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-default-metric

<b>Description</b>	This container defines sub-TLV 18.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>



	<a href="#">mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref te-default-metric</a>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>metric number</b>	
<b>Description</b>	This metric is administratively assigned and can be used to present a differently weighted topology to traffic engineering SPF calculations. To preclude overflow within a traffic engineering SPF implementation, all metrics greater than or equal to MAX_PATH_METRIC SHALL be considered to have a metric of MAX_PATH_METRIC.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref te-default-metric metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>unconstrained-lsp</b>	
<b>Description</b>	This container defines sub-TLV 23.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unconstrained-lsp</a>
<b>Tree</b>	<a href="#">unconstrained-lsp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**count** *number*

<b>Description</b>	Unconstrained TE LSP count(TE Label Switched Paths (LSPs) signalled with zero bandwidth).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unconstrained-lsp count</a> <i>number</i>
<b>Tree</b>	<a href="#">count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *identityref*

<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">mt-isn neighbors neighbor mt-id</a> <i>number</i> <a href="#">system-id</a> <i>string</i> <a href="#">instances instance id</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">unconstrained-lsp type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unreserved-bandwidth**

<b>Description</b>	This container defines unreserved-bandwidth. The units are bytes per second.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i>

	<a href="#">mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth</a>
<b>Tree</b>	<a href="#">unreserved-bandwidth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>setup-priority</b> <a href="#">priority number</a>	
<b>Description</b>	Enter the setup-priority list instance
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth setup-priority priority number</a>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>priority</b> <a href="#">number</a>	
<b>Description</b>	Setup priority level of 0 through 7 to be used by Unreserved Bandwidth sub-TLV 11.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth setup-priority priority number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>bandwidth</b> <a href="#">binary</a>	
<b>Description</b>	The amount of bandwidth reservable in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of

the link. It contains eight 32-bit IEEE floating point numbers(one for each priority). The units are bytes (not bits!) per second. The values correspond to the bandwidth that can be reserved with a setup priority of 0 through 7, arranged in increasing order with priority 0 occurring at the start of the sub-TLV, and priority 7 at the end of the sub-TLV.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref unreserved-bandwidth setup-priority priority number bandwidth binary](#)

**Tree** [bandwidth](#)

**String Length** 4

**Units** bytes per second

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## utilized-bandwidth

**Description** This container defines unidirectional utilized bandwidth.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth](#)

**Tree** [utilized-bandwidth](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bandwidth *binary*

**Description** The bandwidth utilization on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, bandwidth utilization represents the actual utilization of the link (i.e., as measured by the advertising node). For a bundled link, bandwidth utilization is defined to be the sum of the component link bandwidth utilizations.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref](#)

	<a href="#">mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth bandwidth binary</a>
<b>Tree</b>	<a href="#">bandwidth</a>
<b>String Length</b>	4
<b>Units</b>	bytes per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>type identityref</b>	
<b>Description</b>	The type of subTLV being described. The type of subTLV is expressed as a canonical name.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number subtlvs subtlv type identityref utilized-bandwidth type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">is-reachability-subtlvs-type</a> Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.</li> <li>• <a href="#">ip-reachability-subtlvs-type</a> Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.</li> <li>• <a href="#">router-capability-subtlvs-type</a> Base identity for an ISIS TLV 242 SUB-TLV type.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>undefined-subtlvs</b>	
<b>Description</b>	This container describes undefined ISIS TLVs.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs</a>
<b>Tree</b>	<a href="#">undefined-subtlvs</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### undefined-subtlv *type number*

**Description** Sub-TLVs that are not defined in the model or not recognised by system.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs undefined-subtlv type number](#)

**Tree** [undefined-subtlv](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### *type number*

**Description** TLV Type.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs undefined-subtlv type number](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

#### *length number*

**Description** TLV length.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs undefined-subtlv type number length number](#)

**Tree** [length](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### value *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref mt-isn neighbors neighbor mt-id number system-id string instances instance id number undefined-subtlvs undefined-subtlv type number value binary</a>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multi-topology

<b>Description</b>	This container defines the topology supported.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref multi-topology</a>
<b>Tree</b>	<a href="#">multi-topology</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### topologies

<b>Description</b>	This container describes IS topologies.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref multi-topology topologies</a>
<b>Tree</b>	<a href="#">topologies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**topology** *mt-id number*

<b>Description</b>	This list describes a topology.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">multi-topology topologies topology mt-id</a> <i>number</i>
<b>Tree</b>	<a href="#">topology</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-id** *number*

<b>Description</b>	Multi-topology ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">multi-topology topologies topology mt-id</a> <i>number</i>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attributes** *keyword*

<b>Description</b>	Attributes of the LSP for the associated topology.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">multi-topology topologies topology mt-id</a> <i>number</i> <a href="#">attributes</a> <i>keyword</i>
<b>Tree</b>	<a href="#">attributes</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>overload When set, node is overloaded, still part of the topology but cannot be used for transit.</li> <li>attached When set, node is attached to another area using the referred metric and can be used as default gateway.</li> </ul>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## nlpid

**Description** This container defines TLV 129.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [nlpid](#)

**Tree** [nlpid](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## nlpid keyword

**Description** Protocol supported. IPv4 is defined as (0xcc) and IPv6 -(0x8e)

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type identityref](#) [nlpid](#) [nlpid keyword](#)

**Tree** [nlpid](#)

**Options**

- ipv4  
IPv4 Address family.
- ipv6  
IPv6 Address family.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## purge-oi

**Description** This container defines ISIS purge TLV.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">purge-oi</a>
<b>Tree</b>	<a href="#">purge-oi</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-system-id** *string*

<b>Description</b>	System ID of the Intermediate System from which the purge was received.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">purge-oi</a> <a href="#">received-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">received-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-system-id** *string*

<b>Description</b>	System ID of the Intermediate System that inserted this TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">purge-oi</a> <a href="#">source-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">source-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-id-count** *number*

<b>Description</b>	Number of system IDs carried in this TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">purge-oi system-id-count</a> <i>number</i>
<b>Tree</b>	<a href="#">system-id-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-capabilities**

<b>Description</b>	This container defines router capabilities.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities</a>
<b>Tree</b>	<a href="#">router-capabilities</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**capability** *instance-number* *number*

<b>Description</b>	This list describes IS Router capabilities.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i>
<b>Tree</b>	<a href="#">capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-number** *number*

<b>Description</b>	A unique instance number for the instance of the router capabilities TLV. The instance number should be autogenerated by the producer of the data and may be renumbered if the entire LSP contents are replaced in subsequent advertisements.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flags** *keyword*

<b>Description</b>	Router capability flags.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">flags</a> <i>keyword</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>flood <p>When the S bit is set(1), the IS - IS Router CAPABILITY TLV MUST be flooded across the entire routing domain. When the S bit is not set(0), the TLV MUST NOT be leaked between levels . This bit MUST NOT be altered during the TLV leaking.</p> </li> <li>down <p>When the IS-IS Router CAPABILITY TLV is leaked from level - 2 to level-1, the Down bit MUST be set. Otherwise, this bit MUST be clear. IS - IS Router capability TLVs with the Down bit set MUST NOT be leaked from level - 1 to level-2. This is to prevent TLV looping.</p> </li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** *string*

<b>Description</b>	IPv4 router-id.
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**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [router-capabilities capability instance-number](#) *number* [router-id](#) *string*

**Tree** [router-id](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subtlvs

**Description** This container describes router capability TLV sub-TLVs

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [router-capabilities capability instance-number](#) *number* [subtlvs](#)

**Tree** [subtlvs](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subtlv [type](#) *identityref*

**Description** List of subTLV types in the LSDB for the specified TLV

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level level-number](#) *number* [link-state-database lsp lsp-id](#) *string* [tlvs tlv type](#) *identityref* [router-capabilities capability instance-number](#) *number* [subtlvs](#) [subtlv type](#) *identityref*

**Tree** [subtlv](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [type](#) *identityref*

**Description** The type of subTLV being described. The type of subTLV is expressed as a canonical name.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref](#)

- Options**
- **is-reachability-subtlvs-type**  
Base identity for an ISIS TLV 22, 23, 222, 223, 141 SUB-TLV type.
  - **ip-reachability-subtlvs-type**  
Base identity for an ISIS TLV 135, 235, 236, 237 SUB-TLV type.
  - **router-capability-subtlvs-type**  
Base identity for an ISIS TLV 242 SUB-TLV type.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## node-msds

**Description** The Maximum Segment Depth (MSD) values supported by the advertising node. sub-tlv 23.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref node-msds](#)

**Tree** [node-msds](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bmi-msd number

**Description** Base MPLS Imposition MSD (BMI-MSD) signals the total number of MPLS labels that can be imposed, including all service/transport/special labels. sub-tlv 1

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref node-msds bmi-msd number](#)

**Tree** [bmi-msd](#)

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**erld-msd** *number*

<b>Description</b>	Entropy capable Readable Label Depth MSD (ERLD-MSD), is defined to advertise the ERLD [RFC8662] of a given router. sub-tlv 2.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">node-msds erld-msd</a> <i>number</i>
<b>Tree</b>	<a href="#">erld-msd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sbfd-discriminators**

<b>Description</b>	This container defines sbfd discriminators sub-TLV 20.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">sbfd-discriminators</a>
<b>Tree</b>	<a href="#">sbfd-discriminators</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discriminator** *number*

<b>Description</b>	Advertised Seamless BFD (S-BFD) Discriminator.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">sbfd-discriminators discriminator</a> <i>number</i>

<b>Tree</b>	<a href="#">discriminator</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## segment-routing-algorithms

<b>Description</b>	This container defines SR algorithm sub-TLV 19.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref segment-routing-algorithms</a>
<b>Tree</b>	<a href="#">segment-routing-algorithms</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### algorithm *keyword*

<b>Description</b>	The Segment Routing algorithm that is described by the TLV.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref segment-routing-algorithms algorithm keyword</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>spf</code> Shortest Path First (SPF) algorithm based on link metric. This is the well-known shortest path algorithm as computed by the IS-IS Decision process. Consistent with the deployed practice for link-state protocols, algorithm 0 permits any node to overwrite the SPF path with a different path based on local policy.</li> <li>• <code>strict-spf</code> Strict Shortest Path First (SPF) algorithm based on link metric. The algorithm is identical to algorithm 0 but algorithm 1 requires that all nodes along the path will honor the SPF routing decision. Local policy MUST NOT alter the forwarding decision computed by algorithm 1 at the node claiming to support algorithm 1.</li> </ul>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## segment-routing-capability

**Description** This container defines SR Capability sub-TLV 2.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref segment-routing-capability](#)

**Tree** [segment-routing-capability](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags keyword

**Description** Segment Routing Capability Flags.

**Context** [network-instance name string protocols isis instance name string level level-number number link-state-database lsp lsp-id string tlvs tlv type identityref router-capabilities capability instance-number number subtlvs subtlv type identityref segment-routing-capability flags keyword](#)

**Tree** [flags](#)

**Options**

- **ipv4-mpls**  
When set, the router is capable of processing SR MPLS encapsulated IPv4 packets on all interfaces.
- **ipv6-mpls**  
When set, the router is capable of processing SR MPLS encapsulated IPv6 packets on all interfaces.
- **ipv6-sr**  
When set, the router is capable of processing the IPv6 Segment Routing Header on all interfaces.

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srgb-descriptors**

<b>Description</b>	SRGB Descriptors included within the SR capability sub-TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">segment-routing-capability srgb-descriptors</a>
<b>Tree</b>	<a href="#">srgb-descriptors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srgb-descriptor** *range number*

<b>Description</b>	Descriptor entry within the SR capability sub-TLV
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">segment-routing-capability srgb-descriptors srgb-descriptor range number</a>
<b>Tree</b>	<a href="#">srgb-descriptor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**range** *number*

<b>Description</b>	Number of SRGB elements. The range value MUST be greater than 0.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type</a> <i>identityref</i> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type</a> <i>identityref</i> <a href="#">segment-routing-capability srgb-descriptors srgb-descriptor range number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** *number*

<b>Description</b>	The first value of the SRGB when expressed as an MPLS label.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">tlvs tlv type identityref</a> <a href="#">router-capabilities capability instance-number</a> <i>number</i> <a href="#">subtlvs subtlv type identityref</a> <a href="#">segment-routing-capability srgb-descriptors srgb-descriptor</a> <i>range</i> <i>number</i> <b>label</b> <i>number</i>
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-tlvs**

<b>Description</b>	Surrounding container for a list of unknown TLVs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>undefined-tlvs</b>
<b>Tree</b>	<a href="#">undefined-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undefined-tlv** *type* *number*

<b>Description</b>	List of TLVs that are not defined within the model, or are not recognised by the system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <b>undefined-tlvs</b> <b>undefined-tlv</b> <i>type</i> <i>number</i>
<b>Tree</b>	<a href="#">undefined-tlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *number*

<b>Description</b>	TLV Type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">undefined-tlvs undefined-tlv</a> <i>type</i> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**length** *number*

<b>Description</b>	TLV length.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">undefined-tlvs undefined-tlv</a> <i>type</i> <i>number</i> <a href="#">length</a> <i>number</i>
<b>Tree</b>	<a href="#">length</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *binary*

<b>Description</b>	TLV value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp lsp-id</a> <i>string</i> <a href="#">undefined-tlvs undefined-tlv</a> <i>type</i> <i>number</i> <a href="#">value</a> <i>binary</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version number**

<b>Description</b>	PDU version. This is set to 1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">version</a> <i>number</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version2 number**

<b>Description</b>	PDU version2. This is set to 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">link-state-database lsp</a> <a href="#">lsp-id</a> <i>string</i> <a href="#">version2</a> <i>number</i>
<b>Tree</b>	<a href="#">version2</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loopfree-alternate-exclude boolean**

<b>Description</b>	Enable/disable LFA at ISIS level.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">loopfree-alternate-exclude</a> <i>boolean</i>
<b>Tree</b>	<a href="#">loopfree-alternate-exclude</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric-style keyword**

<b>Description</b>	Specifies the metric style to be wide or narrow for the level
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">metric-style</a> <i>keyword</i>
<b>Tree</b>	<a href="#">metric-style</a>
<b>Default</b>	wide
<b>Options</b>	<ul style="list-style-type: none"> <li>narrow This enum describes narrow metric style</li> <li>wide This enum describes wide metric style</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## route-preference

<b>Description</b>	Specify the route preference (admin distance) for IP routes associated with the level
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">route-preference</a>
<b>Tree</b>	<a href="#">route-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## external *number*

<b>Description</b>	Specify the route preference of external routes carried in this level. By default the route preference of external L1 routes is 160. By default the route preference of external L2 routes is 165.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">route-preference external</a> <i>number</i>
<b>Tree</b>	<a href="#">external</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## internal *number*

<b>Description</b>	Specify the route preference of internal routes carried in this level. By default the route preference of internal L1 routes is 15. By default the route preference of internal L2 routes is 18.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">route-preference internal</a> <i>number</i>
<b>Tree</b>	<a href="#">internal</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Per level statistics in an ISIS instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## authentication-failures *number*

<b>Description</b>	Number of times an IS-IS control PDU associated with this level had the correct auth type but failed to pass authentication validation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics authentication-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">authentication-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## authentication-type-failures *number*

<b>Description</b>	Number of times an IS-IS control PDU associated with this level had an auth type field different from that for this system
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics authentication-type-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">authentication-type-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**corrupted-lsps** *number*

<b>Description</b>	Number of corrupted in-memory LSPs detected. LSPs received from the wire with a bad checksum are silently dropped and not counted. LSPs received from the wire with parse errors are counted by lsp-errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics corrupted-lsps</a> <i>number</i>
<b>Tree</b>	<a href="#">corrupted-lsps</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**database-overloads** *number*

<b>Description</b>	Number of times the database has become overloaded
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics database-overloads</a> <i>number</i>
<b>Tree</b>	<a href="#">database-overloads</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**exceeded-max-sequence-number** *number*

<b>Description</b>	Number of times the system has attempted to exceed the maximum sequence number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics exceeded-max-sequence-number</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeded-max-sequence-number</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**lsp-errors** *number*

<b>Description</b>	Number of received LSPs with parse errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics lsp-errors</a> <i>number</i>



<b>Tree</b>	<a href="#">lsp-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **manual-address-drop-from-area** *number*

<b>Description</b>	number of times a manual address has been dropped from area
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics manual-address-drop-from-area</a> <i>number</i>
<b>Tree</b>	<a href="#">manual-address-drop-from-area</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **max-area-address-mismatches** *number*

<b>Description</b>	Number of times an IS-IS control PDU associated with this level was received with a max area address field different from that for this system
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics max-area-address-mismatches</a> <i>number</i>
<b>Tree</b>	<a href="#">max-area-address-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **own-lsp-purges** *number*

<b>Description</b>	Number of times a zero-aged copy of the system's own LSP is received from some other node
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics own-lsp-purges</a> <i>number</i>
<b>Tree</b>	<a href="#">own-lsp-purges</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**sequence-number-skips** *number*

<b>Description</b>	Number of times a sequence number skip has occurred
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics sequence-number-skips</a> <i>number</i>
<b>Tree</b>	<a href="#">sequence-number-skips</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**spf-runs** *number*

<b>Description</b>	number of times a full SPF run has been performed on the level LSDB since the IS-IS manager restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics spf-runs</a> <i>number</i>
<b>Tree</b>	<a href="#">spf-runs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system-id-length-mismatches** *number*

<b>Description</b>	Number of times an IS-IS control PDU associated with this level was received with a system ID field length different from that for this system
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics system-id-length-mismatches</a> <i>number</i>
<b>Tree</b>	<a href="#">system-id-length-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-lsps** *number*

<b>Description</b>	Number of LSPs in the database at the system level
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">statistics total-lsps</a> <i>number</i>

<b>Tree</b>	<a href="#">total-lsps</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### trace-options

<b>Description</b>	Level debug trace options for IS-IS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace *keyword*

<b>Description</b>	List of tracing options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level level-number</a> <i>number</i> <a href="#">trace-options</a> <a href="#">trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">adjacencies</a></li> <li>• <a href="#">lsdb</a></li> <li>• <a href="#">routes</a></li> <li>• <a href="#">spf</a></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### level-capability *keyword*

<b>Description</b>	The level-capability of the intermediate system (router)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-capability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">level-capability</a>
<b>Default</b>	L2
<b>Options</b>	<ul style="list-style-type: none"> <li>• L1</li> </ul> <p>This enum describes ISIS level 1</p>

- L2  
This enum describes ISIS level 2
- L1L2  
This enum describes ISIS level 1-2

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### level-database *level-number number lsp-id string*

<b>Description</b>	Link State database
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string</a>
<b>Tree</b>	<a href="#">level-database</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### level-number *number*

<b>Description</b>	Specifies the IS-IS protocol level to which these attributes are applied.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string</a>
<b>Range</b>	1 to 2
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### lsp-id *string*

<b>Description</b>	The value specifies the LSP Id and is given in the format as 6 octets of adjacency system-id followed by 1 octet Lan-ID and 1 octet LSP Number.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string</a>
<b>String Length</b>	20
<b>Configurable</b>	False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

## attributes

**Description** Enter the attributes context

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [attributes](#)

**Tree** [attributes](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

## attached *boolean*

**Description** Set to true in the L1 LSP when the IS has a Level 2 adjacency.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [attributes attached](#) *boolean*

**Tree** [attached](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

## level1-is-type *boolean*

**Description** Set to true when the router participates in L1

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [attributes level1-is-type](#) *boolean*

**Tree** [level1-is-type](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**level2-is-type** *boolean*

<b>Description</b>	Set to true when the router participates in L2
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">attributes level2-is-type</a> <i>boolean</i>
<b>Tree</b>	<a href="#">level2-is-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**overload** *boolean*

<b>Description</b>	Set to true when the IS is in overload state and should be avoided for transit.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">attributes overload</a> <i>boolean</i>
<b>Tree</b>	<a href="#">overload</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**checksum** *string*

<b>Description</b>	The value indicates the checksum of contents of LSP from the SourceID field in the LSP till the end. The checksum is computed using the Fletcher checksum algorithm.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">checksum</a> <i>string</i>
<b>Tree</b>	<a href="#">checksum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**defined-tlvs**

<b>Description</b>	List of defined TLV-s contained in LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a>
<b>Tree</b>	<a href="#">defined-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**application-specific-srlg neighbor string**

<b>Description</b>	List of application-specific SRLGs. TLV = 238.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a> <a href="#">application-specific-srlg neighbor</a> <i>string</i>
<b>Tree</b>	<a href="#">application-specific-srlg</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor string**

<b>Description</b>	A neighbor, identified by its System ID and one octet to indicate the pseudonode number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a> <a href="#">application-specific-srlg neighbor</a> <i>string</i>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**legacy boolean**

<b>Description</b>	When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLV 138 or TLV 139.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs application-specific-srlg neighbor</a> <i>string</i> <a href="#">legacy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loop-free-alternate** *boolean*

<b>Description</b>	F bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs application-specific-srlg neighbor</a> <i>string</i> <a href="#">loop-free-alternate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">loop-free-alternate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rsvp-te** *boolean*

<b>Description</b>	R bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs application-specific-srlg neighbor</a> <i>string</i> <a href="#">rsvp-te</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rsvp-te</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-policy** *boolean*

<b>Description</b>	S bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs application-specific-srlg neighbor</a> <i>string</i> <a href="#">sr-policy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sr-policy</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sub-tlvs

**Description** Enter the sub-tlvs context

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs application-specific-srlg neighbor](#) *string* *sub-tlvs*

**Tree** [sub-tlvs](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-interface-address *string*

**Description** The IPv4 address of the interface to the neighbor

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs application-specific-srlg neighbor](#) *string* [sub-tlvs ipv4-interface-address](#) *string*

**Tree** [ipv4-interface-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-neighbor-address *string*

**Description** The IPv4 address of the neighbor

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs application-specific-srlg neighbor](#) *string* [sub-tlvs ipv4-neighbor-address](#) *string*

**Tree** [ipv4-neighbor-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-interface-address *string*

**Description** The IPv6 address of the interface to the neighbor

<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs application-specific-srlg neighbor <i>string</i> sub-tlvs ipv6-interface-address <i>string</i>
<b>Tree</b>	ipv6-interface-address
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-neighbor-address *string*

<b>Description</b>	The IPv6 address of the neighbor
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs application-specific-srlg neighbor <i>string</i> sub-tlvs ipv6-neighbor-address <i>string</i>
<b>Tree</b>	ipv6-neighbor-address
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-local-identifier *number*

<b>Description</b>	A local identifier of the link
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs application-specific-srlg neighbor <i>string</i> sub-tlvs link-local-identifier <i>number</i>
<b>Tree</b>	link-local-identifier
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-remote-identifier *number*

<b>Description</b>	A remote identifier of the link
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs application-specific-srlg neighbor <i>string</i> sub-tlvs link-remote-identifier <i>number</i>
<b>Tree</b>	link-remote-identifier
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **shared-risk-link-group** *number*

**Description** List of SRLGs that apply to the adjacency with this neighbor

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs application-specific-srlg neighbor](#) *string* [sub-tlvs shared-risk-link-group](#) *number*

**Tree** [shared-risk-link-group](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **area-addresses** *string*

**Description** Each item represents an area address advertised by the LSP.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs area-addresses](#) *string*

**Tree** [area-addresses](#)

**String Length** 2 to 38

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **authentication**

**Description** Authentication TLV. TLV type = 10

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs authentication](#)

**Tree** [authentication](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**auth-data** *string*

<b>Description</b>	The authentication data
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs authentication auth-data</a> <i>string</i>
<b>Tree</b>	<a href="#">auth-data</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**auth-type** *keyword*

<b>Description</b>	Enter the auth-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs authentication auth-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">auth-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• cleartext</li> <li>• crypto</li> <li>• hmac-md5</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**extended-ipv4-reachability** [ipv4-prefix](#) *string*

<b>Description</b>	TLV specifying extended IPv4 Reachability information in the LSP. TLV type = 135
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">extended-ipv4-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv4-prefix *string*

<b>Description</b>	An IPv4 prefix that is reachable to the router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### down *boolean*

<b>Description</b>	Reads true when the IPv4 prefix was leaked down from Level2 to Level1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">down</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### metric *number*

<b>Description</b>	The default metric to reach the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**sub-tlvs**

<b>Description</b>	SubTLVs of TLV 135, TLV 235, TLV 236 and TLV 237
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**prefix-attribute-flags**

<b>Description</b>	This sub-TLV supports the advertisement of additional flags associated with a given prefix advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags</a>
<b>Tree</b>	<a href="#">prefix-attribute-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**external-prefix *boolean***

<b>Description</b>	Set if the prefix has been redistributed from another protocol (or another IS-IS instance).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags external-prefix</a> <i>boolean</i>
<b>Tree</b>	<a href="#">external-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-identifier** *boolean*

<b>Description</b>	Set when the prefix identifies the advertising router; i.e. it is a host prefix advertising a globally reachable address typically associated with a loopback address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags node-identifier</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	Set when the prefix has been leaked from one level to another (upwards or downwards).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-tag-32bit** *number*

<b>Description</b>	List of 32-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-32bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-32bit</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**route-tag-64bit** *number*

<b>Description</b>	List of 64-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-64bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-64bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**segment-routing-prefix-sid**

<b>Description</b>	Carries a segment routing prefix SID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid</a>
<b>Tree</b>	<a href="#">segment-routing-prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *keyword*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid</a> <a href="#">algorithm</a> <i>keyword</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• spf</li> <li>• strict-spf</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**explicit-null** *boolean*

<b>Description</b>	If set any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID that has an Explicit NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid explicit-null</a> <i>boolean</i>
<b>Tree</b>	<a href="#">explicit-null</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Prefix-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-sid** *boolean*

<b>Description</b>	If set the prefix SID refers to the router identified by the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid node-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**penultimate-hop-popping** *boolean*

<b>Description</b>	If set the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid penultimate-hop-popping</a> <i>boolean</i>
<b>Tree</b>	<a href="#">penultimate-hop-popping</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	If set the prefix to which this Prefix-SID is attached has been propagated by the router from either another level or from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">sr-index-or-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value *boolean***

<b>Description</b>	If set then the Prefix-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid value</a> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-is-reachability *neighbor string***

<b>Description</b>	Each TLV encodes the identity of an adjacent IS neighbor. TLV type = 22
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i>
<b>Tree</b>	<a href="#">extended-is-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**neighbor *string***

<b>Description</b>	An adjacent IS neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**default-metric** *number*

<b>Description</b>	The default metric to reach this adjacent neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <b>default-metric</b> <i>number</i>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**sub-tlvs**

<b>Description</b>	SubTLVs of TLV 22 and TLV 222
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <b>sub-tlvs</b>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**admin-group** *number*

<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-TLV = 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## application-specific-link-attributes

<b>Description</b>	Application Specific Link Attributes. Sub-TLV = 16.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes</a>
<b>Tree</b>	<a href="#">application-specific-link-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## legacy *boolean*

<b>Description</b>	When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLVs 22, 23, 25, 141, 222, and 223, in TLV 138, or in TLV 139 as appropriate.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes legacy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## loop-free-alternate *boolean*

<b>Description</b>	F bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes loop-free-alternate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">loop-free-alternate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rsvp-te** *boolean*

<b>Description</b>	R bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes rsvp-te</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rsvp-te</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-policy** *boolean*

<b>Description</b>	S bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sr-policy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sr-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sub-sub-tlvs**

<b>Description</b>	Enter the sub-sub-tlvs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-group** *number*

<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-Sub-TLV = 3.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-link-bandwidth *number*

<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-Sub-TLV = 9.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs maximum-link-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### min-max-unidirectional-link-delay

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### anomolous *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay anomolous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomolous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay** *number*

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-interface-address** *string*

<b>Description</b>	The IPv4 address of the interface to the neighbor. Sub-TLV = 6.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv4-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv4-neighbor-address** *string*

<b>Description</b>	The IPv4 address of the neighbor. Sub-TLV = 8.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv4-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv6-interface-address** *string*

<b>Description</b>	The IPv6 address of the interface to the neighbor. Sub-TLV = 12.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv6-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv6-neighbor-address** *string*

<b>Description</b>	The IPv4 address of the neighbor. Sub-TLV = 13.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv6-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**link-msd**

<b>Description</b>	The maximum segment depth of the link to the neighbor. Sub-TLV = 15.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd</a>
<b>Tree</b>	<a href="#">link-msd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**msd-info** [msd-type](#) (*keyword* | *number*) [msd-value](#) *number*

<b>Description</b>	List of MSD entries
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type</a> ( <i>keyword   number</i> ) <a href="#">msd-value</a> <i>number</i>
<b>Tree</b>	<a href="#">msd-info</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **msd-type** (*keyword | number*)

<b>Description</b>	MSD type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type</a> ( <i>keyword   number</i> ) <a href="#">msd-value</a> <i>number</i>
<b>Range</b>	2 to 254
<b>Options</b>	<ul style="list-style-type: none"> <li>base-mpls-imposition-msd</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **msd-value** *number*

<b>Description</b>	A number in the range of 0-255 representing the maximum SID depth; for all MSD-Types, 0 represents the lack of ability to support a SID stack of any depth
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type</a> ( <i>keyword   number</i> ) <a href="#">msd-value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-link-bandwidth** *number*

<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-TLV = 9.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs maximum-link-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### min-max-unidirectional-link-delay

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors. Sub-TLV = 34.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### anomalous *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay anomalous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomalous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### max-delay *number*

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-</a>

	<a href="#">reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay** *number*

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-routing-adjacency-sid** [sr-index-or-label](#) *number*

<b>Description</b>	List of Adj-SID sub-TLVs associated with the neighbor. Sub-TLV = 31.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-routing-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-</a>

[reachability neighbor string sub-tlvs segment-routing-adjacency-sid sr-index-or-label number](#)

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adj-set *boolean*****Description**

When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.

**Context**

[network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs extended-is-reachability neighbor string sub-tlvs segment-routing-adjacency-sid sr-index-or-label number adj-set boolean](#)

**Tree**[adj-set](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup *boolean*****Description**

If set, the Adj-SID is eligible for protection

**Context**

[network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs extended-is-reachability neighbor string sub-tlvs segment-routing-adjacency-sid sr-index-or-label number backup boolean](#)

**Tree**[backup](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-family *boolean*****Description**

If set, then the Adj-SID is used for forwarding IPv6 traffic to the neighbor; else the Adj-SID is used for forwarding IPv4 traffic.

**Context**

[network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs extended-is-reachability neighbor string sub-tlvs segment-routing-adjacency-sid sr-index-or-label number ipv6-family boolean](#)

**Tree**[ipv6-family](#)

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Adj-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <i>local</i> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**persistent** *boolean*

<b>Description</b>	When set, the P-Flag indicates that the Adj-SID is persistently allocated, i.e., the Adj-SID value remains consistent across router restart and/or interface flap
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <i>persistent</i> <i>boolean</i>
<b>Tree</b>	<a href="#">persistent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Adj-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <i>value</i> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **weight** *number*

**Description** The value represents the weight of the Adj-SID for the purpose of load balancing

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs extended-is-reachability neighbor](#) *string* [sub-tlvs segment-routing-adjacency-sid sr-index-or-label](#) *number* **weight** *number*

**Tree** [weight](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **segment-routing-lan-adjacency-sid sr-index-or-label** *number*

**Description** List of LAN Adj-SID sub-TLVs. Each describes the set of Adj-SIDs the router assigned to each of its LAN neighbors. Sub-TLV = 32.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs extended-is-reachability neighbor](#) *string* [sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label](#) *number*

**Tree** [segment-routing-lan-adjacency-sid](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sr-index-or-label** *number*

**Description** An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs extended-is-reachability neighbor](#) *string* [sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**adj-set** *boolean*

<b>Description</b>	When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>adj-set</b> <i>boolean</i>
<b>Tree</b>	<a href="#">adj-set</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup** *boolean*

<b>Description</b>	If set, the Adj-SID is eligible for protection
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>backup</b> <i>boolean</i>
<b>Tree</b>	<a href="#">backup</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-family** *boolean*

<b>Description</b>	If set, then the Adj-SID is used for forwarding IPv6 traffic to the neighbor; else the Adj-SID is used for forwarding IPv4 traffic.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>ipv6-family</b> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-family</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Adj-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>local</b> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-system-id** *string*

<b>Description</b>	IS-IS system-ID of the LAN neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>neighbor-system-id</b> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**persistent** *boolean*

<b>Description</b>	When set, the P-Flag indicates that the Adj-SID is persistently allocated, i.e., the Adj-SID value remains consistent across router restart and/or interface flap
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>persistent</b> <i>boolean</i>
<b>Tree</b>	<a href="#">persistent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Adj-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>value</b> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**weight** *number*

<b>Description</b>	The value represents the weight of the Adj-SID for the purpose of load balancing
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>weight</b> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth. Sub-TLV = 18.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs extended-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hostname** *string*

<b>Description</b>	Host name that advertised this LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs hostname</a> <i>string</i>
<b>Tree</b>	<a href="#">hostname</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv4-external-reachability** [ipv4-prefix](#) *string*

<b>Description</b>	TLV specifying external IPv4 Reachability information in the LSP. External reachability is typically routing information learned from another protocol. TLV type = 130
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-external-reachability ipv4-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-external-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv4-prefix** *string*

<b>Description</b>	An IPv4 prefix that is reachable to the router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-external-reachability ipv4-prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**default-metric** *number*

<b>Description</b>	The default metric to reach the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-external-reachability ipv4-prefix</a> <i>string</i> <a href="#">default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Range</b>	0 to 63
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**default-metric-type** *keyword*

<b>Description</b>	The default metric type: internal or external.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-external-reachability ipv4-prefix</a> <i>string</i> <a href="#">default-metric-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">default-metric-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• internal This enum describes internal route type</li> <li>• external This enum describes external route type</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**down** *boolean*

<b>Description</b>	Reads true when the IPv4 prefix was leaked down from Level2 to Level1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-external-reachability ipv4-prefix</a> <i>string</i> <a href="#">down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">down</a>
<b>Configurable</b>	False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv4-interface-addresses (*ipv4-address* | *ipv6-address*)

**Description** Each item represents an IPv4 address configured on an interface in this IS-IS instance.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs ipv4-interface-addresses](#) (*ipv4-address* | *ipv6-address*)

**Tree** [ipv4-interface-addresses](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv4-internal-reachability [ipv4-prefix](#) *string*

**Description** TLV specifying internal IPv4 Reachability information in the LSP. TLV type = 128

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs ipv4-internal-reachability ipv4-prefix](#) *string*

**Tree** [ipv4-internal-reachability](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv4-prefix *string*

**Description** An IPv4 prefix that is reachable to the router.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs ipv4-internal-reachability ipv4-prefix](#) *string*

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### default-metric *number*

**Description** The default metric to reach the IPv4 prefix.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs ipv4-internal-reachability ipv4-prefix](#) *string* **default-metric** *number*

**Tree** [default-metric](#)

**Range** 0 to 63

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### default-metric-type *keyword*

**Description** The default metric type: internal or external.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs ipv4-internal-reachability ipv4-prefix](#) *string* **default-metric-type** *keyword*

**Tree** [default-metric-type](#)

**Options**

- internal  
This enum describes internal route type
- external  
This enum describes external route type

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### down *boolean*

**Description** Reads true when the IPv4 prefix was leaked down from Level2 to Level1.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-internal-reachability ipv4-prefix</a> <i>string</i> <a href="#">down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">down</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **ipv4-srlg** [neighbor](#) *string*

<b>Description</b>	List of SRLGs advertised by the router. TLV = 138.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-srlg</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor** *string*

<b>Description</b>	A neighbor, identified by its System ID and one octet to indicate the pseudonode number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-interface-address** *string*

<b>Description</b>	The IPv4 address of the interface to the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i> <a href="#">ipv4-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-interface-address</a>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-neighbor-address *string*

<b>Description</b>	The IPv4 address of the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i> <a href="#">ipv4-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### numbered *boolean*

<b>Description</b>	When set, the interface to the neighbor is numbered. When unset it is unnumbered.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i> <a href="#">numbered</a> <i>boolean</i>
<b>Tree</b>	<a href="#">numbered</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### shared-risk-link-group *number*

<b>Description</b>	List of SRLGs that apply to the adjacency with this neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv4-srlg neighbor</a> <i>string</i> <a href="#">shared-risk-link-group</a> <i>number</i>
<b>Tree</b>	<a href="#">shared-risk-link-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-interface-addresses** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Each item represents an IPv6 address configured on an interface in this IS-IS instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-interface-addresses</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ipv6-interface-addresses</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv6-reachability** [ipv6-prefix](#) *string*

<b>Description</b>	TLV specifying IPv6 Reachability information in the LSP. TLV type = 236
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv6-prefix** *string*

<b>Description</b>	An IPv6 prefix that is reachable to the router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**down** *boolean*

<b>Description</b>	Reads true when the IPv6 prefix was leaked down from Level2 to Level1.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <b>down</b> <i>boolean</i>
<b>Tree</b>	<a href="#">down</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**external** *boolean*

<b>Description</b>	Reads true when the IPv6 prefix reachability is external (learned from another protocol).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <b>external</b> <i>boolean</i>
<b>Tree</b>	<a href="#">external</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**metric** *number*

<b>Description</b>	The metric to reach this IPv6 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <b>metric</b> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**sub-tlvs**

<b>Description</b>	SubTLVs of TLV 135, TLV 235, TLV 236 and TLV 237
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a> <a href="#">ipv6-reachability</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**prefix-attribute-flags**

<b>Description</b>	This sub-TLV supports the advertisement of additional flags associated with a given prefix advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a> <a href="#">ipv6-reachability</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs</a> <a href="#">prefix-attribute-flags</a>
<b>Tree</b>	<a href="#">prefix-attribute-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**external-prefix *boolean***

<b>Description</b>	Set if the prefix has been redistributed from another protocol (or another IS-IS instance).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs</a> <a href="#">ipv6-reachability</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs</a> <a href="#">prefix-attribute-flags</a> <a href="#">external-prefix</a> <i>boolean</i>
<b>Tree</b>	<a href="#">external-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-identifier** *boolean*

<b>Description</b>	Set when the prefix identifies the advertising router; i.e. it is a host prefix advertising a globally reachable address typically associated with a loopback address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags node-identifier</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	Set when the prefix has been leaked from one level to another (upwards or downwards).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-tag-32bit** *number*

<b>Description</b>	List of 32-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-32bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-32bit</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**route-tag-64bit** *number*

<b>Description</b>	List of 64-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-64bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-64bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**segment-routing-prefix-sid**

<b>Description</b>	Carries a segment routing prefix SID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid</a>
<b>Tree</b>	<a href="#">segment-routing-prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *keyword*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid algorithm</a> <i>keyword</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• spf</li> <li>• strict-spf</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**explicit-null** *boolean*

<b>Description</b>	If set any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID that has an Explicit NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid explicit-null</a> <i>boolean</i>
<b>Tree</b>	<a href="#">explicit-null</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Prefix-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-sid** *boolean*

<b>Description</b>	If set the prefix SID refers to the router identified by the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid node-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**penultimate-hop-popping** *boolean*

<b>Description</b>	If set the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.
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<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs ipv6-reachability ipv6-prefix <i>string</i> sub-tlvs segment-routing-prefix-sid penultimate-hop-popping <i>boolean</i>
<b>Tree</b>	penultimate-hop-popping
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	If set the prefix to which this Prefix-SID is attached has been propagated by the router from either another level or from another protocol.
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs ipv6-reachability ipv6-prefix <i>string</i> sub-tlvs segment-routing-prefix-sid re-advertised <i>boolean</i>
<b>Tree</b>	re-advertised
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs ipv6-reachability ipv6-prefix <i>string</i> sub-tlvs segment-routing-prefix-sid sr-index-or-label <i>number</i>
<b>Tree</b>	sr-index-or-label
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Prefix-SID carries a value
<b>Context</b>	network-instance name <i>string</i> protocols isis instance name <i>string</i> level-database level-number <i>number</i> lsp-id <i>string</i> defined-tlvs ipv6-reachability ipv6-prefix <i>string</i> sub-tlvs segment-routing-prefix-sid value <i>boolean</i>



<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-srlg [neighbor string](#)

<b>Description</b>	List of IPv6 SRLGs advertised by the router. TLV = 139.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs ipv6-srlg neighbor string</a>
<b>Tree</b>	<a href="#">ipv6-srlg</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor [string](#)

<b>Description</b>	A neighbor, identified by its System ID and one octet to indicate the pseudonode number
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs ipv6-srlg neighbor string</a>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-interface-address [string](#)

<b>Description</b>	The IPv6 address of the interface to the neighbor
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs ipv6-srlg neighbor string ipv6-interface-address string</a>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-neighbor-address** *string*

<b>Description</b>	The IPv6 address of the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-srlg neighbor</a> <i>string</i> <a href="#">ipv6-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-address-included** *boolean*

<b>Description</b>	When set, the IPv6 neighbor address is included.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-srlg neighbor</a> <i>string</i> <a href="#">neighbor-address-included</a> <i>boolean</i>
<b>Tree</b>	<a href="#">neighbor-address-included</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**shared-risk-link-group** *number*

<b>Description</b>	List of SRLGs that apply to the adjacency with this neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-srlg neighbor</a> <i>string</i> <a href="#">shared-risk-link-group</a> <i>number</i>
<b>Tree</b>	<a href="#">shared-risk-link-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-te-router-id** *string*

<b>Description</b>	A single stable address that can always be referenced in a path that will be reachable from multiple hops away. TLV = 140.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs ipv6-te-router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-te-router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **is-reachability** [neighbor](#) *string*

<b>Description</b>	Each TLV encodes the identity of an adjacent IS neighbor. TLV type = 2
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs is-reachability neighbor</a> <i>string</i>
<b>Tree</b>	<a href="#">is-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **neighbor** *string*

<b>Description</b>	An adjacent IS neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs is-reachability neighbor</a> <i>string</i>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **default-metric** *number*

<b>Description</b>	The default metric to reach this adjacent neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs is-reachability neighbor</a> <i>string</i> <a href="#">default-metric</a> <i>number</i>

<b>Tree</b>	<a href="#">default-metric</a>
<b>Range</b>	0 to 63
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **default-metric-type** *keyword*

<b>Description</b>	The default metric type: internal or external.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs is-reachability neighbor</a> <i>string</i> <a href="#">default-metric-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">default-metric-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• internal</li> <li>• external</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **mt-ipv4-reachability** [ipv4-prefix](#) *string*

<b>Description</b>	TLV specifying multi-topology IPv4 reachability information in the LSP. TLV type = 235
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">mt-ipv4-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **ipv4-prefix** *string*

<b>Description</b>	An IPv4 prefix that is reachable to the router.
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**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **down** *boolean*

**Description** Reads true when the IPv4 prefix was leaked down from Level2 to Level1.

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string down boolean](#)

**Tree** [down](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **metric** *number*

**Description** The default metric to reach the IPv4 prefix.

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string metric number](#)

**Tree** [metric](#)

**Range** 0 to 16777215

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### **mt-id** *number*

**Description** A multi-topology ID.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i>
<b>Tree</b>	<a href="#">mt-id</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### sub-tlvs

<b>Description</b>	SubTLVs of TLV 135, TLV 235, TLV 236 and TLV 237
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### prefix-attribute-flags

<b>Description</b>	This sub-TLV supports the advertisement of additional flags associated with a given prefix advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags</a>
<b>Tree</b>	<a href="#">prefix-attribute-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### external-prefix *boolean*

<b>Description</b>	Set if the prefix has been redistributed from another protocol (or another IS-IS instance).
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags external-prefix</a> <i>boolean</i>
<b>Tree</b>	<a href="#">external-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-identifier** *boolean*

<b>Description</b>	Set when the prefix identifies the advertising router; i.e. it is a host prefix advertising a globally reachable address typically associated with a loopback address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags node-identifier</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	Set when the prefix has been leaked from one level to another (upwards or downwards).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-tag-32bit** *number*

<b>Description</b>	List of 32-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-32bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-32bit</a>

<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### route-tag-64bit *number*

<b>Description</b>	List of 64-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string sub-tlvs route-tag-64bit number</a>
<b>Tree</b>	<a href="#">route-tag-64bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### segment-routing-prefix-sid

<b>Description</b>	Carries a segment routing prefix SID
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string sub-tlvs segment-routing-prefix-sid</a>
<b>Tree</b>	<a href="#">segment-routing-prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### algorithm *keyword*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv4-reachability ipv4-prefix string sub-tlvs segment-routing-prefix-sid algorithm keyword</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>spf</li> </ul>



- strict-spf

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### explicit-null *boolean*

<b>Description</b>	If set any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID that has an Explicit NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid explicit-null</a> <i>boolean</i>
<b>Tree</b>	<a href="#">explicit-null</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local *boolean*

<b>Description</b>	If set, then the value/index carried by the Prefix-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### node-sid *boolean*

<b>Description</b>	If set the prefix SID refers to the router identified by the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid node-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**penultimate-hop-popping** *boolean*

<b>Description</b>	If set the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid penultimate-hop-popping</a> <i>boolean</i>
<b>Tree</b>	<a href="#">penultimate-hop-popping</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	If set the prefix to which this Prefix-SID is attached has been propagated by the router from either another level or from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">sr-index-or-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Prefix-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv4-reachability ipv4-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid value</a> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-ipv6-reachability** [ipv6-prefix](#) *string*

<b>Description</b>	TLV specifying IPv6 Reachability information in the LSP. TLV type = 237
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">mt-ipv6-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**ipv6-prefix** *string*

<b>Description</b>	An IPv6 prefix that is reachable to the router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**down** *boolean*

<b>Description</b>	Reads true when the IPv6 prefix was leaked down from Level2 to Level1.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">down</a> <i>boolean</i>
<b>Tree</b>	<a href="#">down</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**external** *boolean*

<b>Description</b>	Reads true when the IPv6 prefix reachability is external (learned from another protocol).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">external</a> <i>boolean</i>
<b>Tree</b>	<a href="#">external</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**metric** *number*

<b>Description</b>	The metric to reach this IPv6 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**mt-id** *number*

<b>Description</b>	A multi-topology ID.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">mt-id</a> <i>number</i>
<b>Tree</b>	<a href="#">mt-id</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### sub-tlvs

<b>Description</b>	SubTLVs of TLV 135, TLV 235, TLV 236 and TLV 237
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### prefix-attribute-flags

<b>Description</b>	This sub-TLV supports the advertisement of additional flags associated with a given prefix advertisement.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags</a>
<b>Tree</b>	<a href="#">prefix-attribute-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### external-prefix *boolean*

<b>Description</b>	Set if the prefix has been redistributed from another protocol (or another IS-IS instance).
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags external-prefix</a> <i>boolean</i>
<b>Tree</b>	<a href="#">external-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-identifier** *boolean*

<b>Description</b>	Set when the prefix identifies the advertising router; i.e. it is a host prefix advertising a globally reachable address typically associated with a loopback address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags node-identifier</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	Set when the prefix has been leaked from one level to another (upwards or downwards).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs prefix-attribute-flags re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-tag-32bit** *number*

<b>Description</b>	List of 32-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs route-tag-32bit</a> <i>number</i>
<b>Tree</b>	<a href="#">route-tag-32bit</a>

<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### route-tag-64bit *number*

<b>Description</b>	List of 64-bit administrative tag values associated with the IPv4 prefix.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv6-reachability ipv6-prefix string sub-tlvs route-tag-64bit number</a>
<b>Tree</b>	<a href="#">route-tag-64bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### segment-routing-prefix-sid

<b>Description</b>	Carries a segment routing prefix SID
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv6-reachability ipv6-prefix string sub-tlvs segment-routing-prefix-sid</a>
<b>Tree</b>	<a href="#">segment-routing-prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### algorithm *keyword*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs mt-ipv6-reachability ipv6-prefix string sub-tlvs segment-routing-prefix-sid algorithm keyword</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>spf</li> </ul>

- strict-spf

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### explicit-null *boolean*

<b>Description</b>	If set any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID that has an Explicit NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid explicit-null</a> <i>boolean</i>
<b>Tree</b>	<a href="#">explicit-null</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local *boolean*

<b>Description</b>	If set, then the value/index carried by the Prefix-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### node-sid *boolean*

<b>Description</b>	If set the prefix SID refers to the router identified by the prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid node-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**penultimate-hop-popping** *boolean*

<b>Description</b>	If set the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid penultimate-hop-popping</a> <i>boolean</i>
<b>Tree</b>	<a href="#">penultimate-hop-popping</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-advertised** *boolean*

<b>Description</b>	If set the prefix to which this Prefix-SID is attached has been propagated by the router from either another level or from another protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid re-advertised</a> <i>boolean</i>
<b>Tree</b>	<a href="#">re-advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">sr-index-or-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Prefix-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-ipv6-reachability ipv6-prefix</a> <i>string</i> <a href="#">sub-tlvs segment-routing-prefix-sid value</a> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mt-is-reachability** [neighbor](#) *string*

<b>Description</b>	Each TLV encodes the identity of an adjacent IS neighbor in a specific topology. TLV type = 222
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i>
<b>Tree</b>	<a href="#">mt-is-reachability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**neighbor** *string*

<b>Description</b>	An adjacent IS neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i>
<b>String Length</b>	17
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**default-metric** *number*

<b>Description</b>	The default metric to reach this adjacent neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <b>default-metric</b> <i>number</i>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**mt-id** *number*

<b>Description</b>	A multi-topology ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <b>mt-id</b> <i>number</i>
<b>Tree</b>	<a href="#">mt-id</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**sub-tlvs**

<b>Description</b>	SubTLVs of TLV 22 and TLV 222
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <b>sub-tlvs</b>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**admin-group** *number*

<b>Description</b>	A bit mask representing the administrative groups to which the interface belongs. Sub-TLV = 3.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs admin-group</a> <i>number</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**application-specific-link-attributes**

<b>Description</b>	Application Specific Link Attributes. Sub-TLV = 16.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes</a>
<b>Tree</b>	<a href="#">application-specific-link-attributes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**legacy** *boolean*

<b>Description</b>	When the legacy flag is set, all of the applications specified in the bit mask MUST use the legacy advertisements for the corresponding link found in TLVs 22, 23, 25, 141, 222, and 223, in TLV 138, or in TLV 139 as appropriate.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes legacy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loop-free-alternate** *boolean*

<b>Description</b>	F bit is set in the Standard Application Identifier Bit Mask
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes loop-free-alternate</a> <i>boolean</i>
<b>Tree</b>	<a href="#">loop-free-alternate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rsvp-te** *boolean*

<b>Description</b>	R bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes rsvp-te</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rsvp-te</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-policy** *boolean*

<b>Description</b>	S bit is set in the Standard Application Identifier Bit Mask
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sr-policy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sr-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sub-sub-tlvs**

<b>Description</b>	Enter the sub-sub-tlvs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs application-specific-link-attributes sub-sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-sub-tlvs</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-group** *number*

**Description** A bit mask representing the administrative groups to which the interface belongs. Sub-Sub-TLV = 3.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs admin-group](#) *number*

**Tree** [admin-group](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-link-bandwidth** *number*

**Description** The (LAG aware) bandwidth of the interface to the neighbor. Sub-Sub-TLV = 9.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs maximum-link-bandwidth](#) *number*

**Tree** [maximum-link-bandwidth](#)

**Units** bytes-per-second

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **min-max-unidirectional-link-delay**

**Description** The minimum and maximum delay between two directly connected IS-IS neighbors.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay](#)

**Tree** [min-max-unidirectional-link-delay](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anomolous** *boolean*

**Description** If the A bit is cleared, the values represent steady-state link performance.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay](#) [anomolous](#) *boolean*

**Tree** [anomolous](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-delay** *number*

**Description** Maximum forward-path delay (from the advertising router to the remote neighbor)

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay](#) [max-delay](#) *number*

**Tree** [max-delay](#)

**Units** microseconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **min-delay** *number*

**Description** Minimum forward-path delay (from the advertising router to the remote neighbor)

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs min-max-unidirectional-link-delay](#) [min-delay](#) *number*

**Tree** [min-delay](#)

**Units** microseconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-default-metric *number*

**Description** An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs application-specific-link-attributes sub-sub-tlvs te-default-metric](#) *number*

**Tree** [te-default-metric](#)

**Range** 0 to 16777215

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-interface-address *string*

**Description** The IPv4 address of the interface to the neighbor. Sub-TLV = 6.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs ipv4-interface-address](#) *string*

**Tree** [ipv4-interface-address](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv4-neighbor-address *string*

**Description** The IPv4 address of the neighbor. Sub-TLV = 8.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs mt-is-reachability neighbor](#) *string* [sub-tlvs ipv4-neighbor-address](#) *string*

**Tree** [ipv4-neighbor-address](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv6-interface-address *string*

<b>Description</b>	The IPv6 address of the interface to the neighbor. Sub-TLV = 12.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv6-interface-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### ipv6-neighbor-address *string*

<b>Description</b>	The IPv4 address of the neighbor. Sub-TLV = 13.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs ipv6-neighbor-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### link-msd

<b>Description</b>	The maximum segment depth of the link to the neighbor. Sub-TLV = 15.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd</a>
<b>Tree</b>	<a href="#">link-msd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**msd-info** *msd-type (keyword | number) msd-value number*

<b>Description</b>	List of MSD entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type (keyword   number) msd-value</a> <i>number</i>
<b>Tree</b>	<a href="#">msd-info</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**msd-type** *(keyword | number)*

<b>Description</b>	MSD type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type (keyword   number) msd-value</a> <i>number</i>
<b>Range</b>	2 to 254
<b>Options</b>	<ul style="list-style-type: none"> <li>base-mpls-imposition-msd</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**msd-value** *number*

<b>Description</b>	A number in the range of 0-255 representing the maximum SID depth; for all MSD-Types, 0 represents the lack of ability to support a SID stack of any depth
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs link-msd msd-info msd-type (keyword   number) msd-value</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-link-bandwidth** *number*

<b>Description</b>	The (LAG aware) bandwidth of the interface to the neighbor. Sub-TLV = 9.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs maximum-link-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-link-bandwidth</a>
<b>Units</b>	bytes-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-max-unidirectional-link-delay**

<b>Description</b>	The minimum and maximum delay between two directly connected IS-IS neighbors. Sub-TLV = 34.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay</a>
<b>Tree</b>	<a href="#">min-max-unidirectional-link-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anomolous** *boolean*

<b>Description</b>	If the A bit is cleared, the values represent steady-state link performance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay anomolous</a> <i>boolean</i>
<b>Tree</b>	<a href="#">anomolous</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-delay number**

<b>Description</b>	Maximum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay max-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">max-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-delay number**

<b>Description</b>	Minimum forward-path delay (from the advertising router to the remote neighbor)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs min-max-unidirectional-link-delay min-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">min-delay</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-routing-adjacency-sid [sr-index-or-label](#) number**

<b>Description</b>	List of Adj-SID sub-TLVs associated with the neighbor. Sub-TLV = 31.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-routing-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adj-set** *boolean*

<b>Description</b>	When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">adj-set</a> <i>boolean</i>
<b>Tree</b>	<a href="#">adj-set</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup** *boolean*

<b>Description</b>	If set, the Adj-SID is eligible for protection
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">backup</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-family** *boolean*

<b>Description</b>	If set, then the Adj-SID is used for forwarding IPv6 traffic to the neighbor; else the Adj-SID is used for forwarding IPv4 traffic.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">ipv6-family</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-family</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Adj-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**persistent** *boolean*

<b>Description</b>	When set, the P-Flag indicates that the Adj-SID is persistently allocated, i.e., the Adj-SID value remains consistent across router restart and/or interface flap
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">persistent</a> <i>boolean</i>
<b>Tree</b>	<a href="#">persistent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Adj-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">value</a> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**weight** *number*

<b>Description</b>	The value represents the weight of the Adj-SID for the purpose of load balancing
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-routing-lan-adjacency-sid** [sr-index-or-label](#) *number*

<b>Description</b>	List of LAN Adj-SID sub-TLVs. Each describes the set of Adj-SIDs the router assigned to each of its LAN neighbors. Sub-TLV = 32.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-routing-lan-adjacency-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing an offset in the SID/label space advertised by the router or else a direct encoding of an MPLS label value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**adj-set** *boolean*

<b>Description</b>	When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label number adj-set</a> <i>boolean</i>
<b>Tree</b>	<a href="#">adj-set</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backup** *boolean*

<b>Description</b>	If set, the Adj-SID is eligible for protection
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label number backup</a> <i>boolean</i>
<b>Tree</b>	<a href="#">backup</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**ipv6-family** *boolean*

<b>Description</b>	If set, then the Adj-SID is used for forwarding IPv6 traffic to the neighbor; else the Adj-SID is used for forwarding IPv4 traffic.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">ipv6-family</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-family</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local** *boolean*

<b>Description</b>	If set, then the value/index carried by the Adj-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-system-id** *string*

<b>Description</b>	IS-IS system-ID of the LAN neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <a href="#">neighbor-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**persistent** *boolean*

<b>Description</b>	When set, the P-Flag indicates that the Adj-SID is persistently allocated, i.e., the Adj-SID value remains consistent across router restart and/or interface flap
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>persistent</b> <i>boolean</i>
<b>Tree</b>	<a href="#">persistent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *boolean*

<b>Description</b>	If set then the Adj-SID carries a value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>value</b> <i>boolean</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**weight** *number*

<b>Description</b>	The value represents the weight of the Adj-SID for the purpose of load balancing
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs segment-routing-lan-adjacency-sid sr-index-or-label</a> <i>number</i> <b>weight</b> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-default-metric** *number*

<b>Description</b>	An administratively assigned metric used as an alternative to the normal SPF metric based (typically) on link bandwidth. Sub-TLV = 18.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs mt-is-reachability neighbor</a> <i>string</i> <a href="#">sub-tlvs te-default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-default-metric</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multi-topology**

<b>Description</b>	The Multi-Topology TLV, type 229.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs multi-topology</a>
<b>Tree</b>	<a href="#">multi-topology</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**topology** [mt-id](#) *number*

<b>Description</b>	The list of multi-topology IDs that the router is participating in
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs multi-topology topology mt-id</a> <i>number</i>
<b>Tree</b>	<a href="#">topology</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**mt-id number**

<b>Description</b>	A multi-topology ID.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs multi-topology topology mt-id number</a>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**attached boolean**

<b>Description</b>	Reads true when the topology is attached to Level 2
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs multi-topology topology mt-id number attached boolean</a>
<b>Tree</b>	<a href="#">attached</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**overload boolean**

<b>Description</b>	Reads true when the topology is in overload state.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs multi-topology topology mt-id number overload boolean</a>
<b>Tree</b>	<a href="#">overload</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**nlpid keyword**

<b>Description</b>	Each item represents a network layer protocol supported by the IS-IS Instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs nlpid</a> <i>keyword</i>
<b>Tree</b>	<a href="#">nlpid</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPv4 NLPID 0xCC corresponding to IPv4</li> <li>• IPv6 NLPID 0x8E corresponding to IPv6</li> <li>• CLNS NLPID 0x81 corresponding to CLNS</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**purge-oi string**

<b>Description</b>	This indicates System ID that originated a purge.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs purge-oi</a> <i>string</i>
<b>Tree</b>	<a href="#">purge-oi</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**router-capability**

<b>Description</b>	Allows a router to announce its capabilities within an IS-IS level or the entire routing domain. TLV = 242.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability</a>
<b>Tree</b>	<a href="#">router-capability</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### leaked-down *boolean*

<b>Description</b>	When true, the TLV was leaked down from Level 2 to Level 1 and must not be leaked back up to L2
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability leaked-down boolean</a>
<b>Tree</b>	<a href="#">leaked-down</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### router-id *string*

<b>Description</b>	Router ID indicating the source of the TLV
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability router-id string</a>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### scope-is-domain-wide *boolean*

<b>Description</b>	When true, the TLV MUST be flooded across the entire routing domain. When false, the TLV MUST NOT be leaked between levels.
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability scope-is-domain-wide boolean</a>
<b>Tree</b>	<a href="#">scope-is-domain-wide</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### sub-tlvs

<b>Description</b>	Sub-TLVs of TLV 242
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs</a>
<b>Tree</b>	<a href="#">sub-tlvs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### node-msd

<b>Description</b>	Used to carry the provisioned SID depth of the router originating the capability TLV. Node MSD is the smallest MSD supported by the node on the set of interfaces configured for use by the advertising IGP instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs node-msd</a>
<b>Tree</b>	<a href="#">node-msd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### msd-info [msd-type](#) (*keyword* | *number*) [msd-value](#) *number*

<b>Description</b>	List of MSD entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs node-msd msd-info msd-type</a> ( <i>keyword</i>   <i>number</i> ) <a href="#">msd-value</a> <i>number</i>
<b>Tree</b>	<a href="#">msd-info</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **msd-type** (*keyword | number*)

**Description** MSD type

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability sub-tlvs node-msd msd-info msd-type \(keyword | number\) msd-value number](#)

**Range** 2 to 254

**Options**

- base-mpls-imposition-msd

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **msd-value** *number*

**Description** A number in the range of 0-255 representing the maximum SID depth; for all MSD-Types, 0 represents the lack of ability to support a SID stack of any depth

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability sub-tlvs node-msd msd-info msd-type \(keyword | number\) msd-value number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sr-algorithm**

**Description** Advertises the IGP algorithms that the router is using

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string defined-tlvs router-capability sub-tlvs sr-algorithm](#)

**Tree** [sr-algorithm](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**algorithm** *number*

<b>Description</b>	List of algorithm types supported by the router. Algorithm 0 should always be in the list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-algorithm</a> <i>algorithm number</i>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-capabilities**

<b>Description</b>	Used to advertise its SR data plane capability and the range of MPLS label values each router uses for Segment Routing in the case where global SIDs are allocated.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities</a>
<b>Tree</b>	<a href="#">sr-capabilities</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-support** *boolean*

<b>Description</b>	When true, the router is capable of processing SR-MPLS-encapsulated IPv4 packets on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities ipv4-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-support** *boolean*

<b>Description</b>	When true, the router is capable of processing SR-MPLS-encapsulated IPv6 packets on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities</a> <a href="#">ipv6-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srgb-descriptor** [sr-index-or-label](#) *number range* *number*

<b>Description</b>	List of Segment Routing Global Block descriptors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities</a> <a href="#">srgb-descriptor sr-index-or-label</a> <i>number range</i> <i>number</i>
<b>Tree</b>	<a href="#">srgb-descriptor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-index-or-label** *number*

<b>Description</b>	An index representing the first value of the SRGB. The meaning (index or label) is determined from the length of the sub-tlv.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities</a> <a href="#">srgb-descriptor sr-index-or-label</a> <i>number range</i> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**range** *number*

<b>Description</b>	The number of SRGB elements
--------------------	-----------------------------

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-capabilities srgb-descriptor sr-index-or-label</a> <i>number range number</i>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-local-block

<b>Description</b>	Used to advertise the range of labels the node has reserved for local SIDs.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-local-block</a>
<b>Tree</b>	<a href="#">sr-local-block</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### srlb-descriptor [sr-index-or-label](#) *number range number*

<b>Description</b>	List of Segment Routing Local Block descriptors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-local-block srlb-descriptor sr-index-or-label</a> <i>number range number</i>
<b>Tree</b>	<a href="#">srlb-descriptor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-index-or-label *number*

<b>Description</b>	An index representing the first value of the SRLB. The meaning (index or label) is determined from the length of the sub-tlv.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">defined-tlvs router-capability sub-tlvs sr-local-block srlb-descriptor sr-index-or-label</a> <i>number range number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### range *number*

**Description** The number of SRLB elements

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs router-capability sub-tlvs sr-local-block srlb-descriptor sr-index-or-label](#) *number* *range* *number*

**Range** 1 to 16777215

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-router-id *string*

**Description** A single stable address that can always be referenced in a path that will be reachable from multiple hops away. TLV = 134.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [defined-tlvs te-router-id](#) *string*

**Tree** [te-router-id](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### maximum-area-addresses *number*

**Description** The value indicates the maximum number of areas supported by the originator of the LSP. A value of 0 indicates a default of 3 areas.

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [level-database level-number](#) *number* [lsp-id](#) *string* [maximum-area-addresses](#) *number*

**Tree** [maximum-area-addresses](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**pdu-length** *number*

<b>Description</b>	The value indicates the PDU length for instance LSPs, CSNPs OR PSNPs at both IS-IS protocol levels i.e. L1 and L2 as maintained in the database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">pdu-length</a> <i>number</i>
<b>Tree</b>	<a href="#">pdu-length</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**pdu-type** *number*

<b>Description</b>	The value indicates the PDU type for instance LSPs, CSNPs OR PSNPs at both IS-IS protocol levels i.e. L1 and L2 as maintained in of the object packet-type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">pdu-type</a> <i>number</i>
<b>Tree</b>	<a href="#">pdu-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**pkt-version** *number*

<b>Description</b>	The value indicates the version of the ISIS protocol that has generated the Packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">pkt-version</a> <i>number</i>
<b>Tree</b>	<a href="#">pkt-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**remaining-lifetime** *number*

<b>Description</b>	The value indicates the remaining lifetime of this LSP and is a decrementing counter that decrements in seconds starting from the value as received in the LSP if not self-originated OR from <code>lsp-life-time</code> for self originated LSPs. When the remaining lifetime becomes zero, the contents of the LSP should not be considered for SPF calculation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">remaining-lifetime</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining-lifetime</a>
<b>Range</b>	0 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**sequence-number** *string*

<b>Description</b>	The value indicates the sequence number of an LSP and is a four byte quantity that represents the version of an LSP. The higher the sequence number, the more up to date the information. The sequence number is always incremented by the system that originated the LSP and ensures that there is only one version of that LSP in the entire network.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">sequence-number</a> <i>string</i>
<b>Tree</b>	<a href="#">sequence-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

**system-id-len** *number*

<b>Description</b>	The value indicates the length of the system-id as used by the originator.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">level-database level-number</a> <i>number</i> <a href="#">lsp-id</a> <i>string</i> <a href="#">system-id-len</a> <i>number</i>
<b>Tree</b>	<a href="#">system-id-len</a>
<b>Configurable</b>	False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### undefined-tlvs *string*

**Description** Undefined TLV-s as contents of the LSP.

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string undefined-tlvs string](#)

**Tree** [undefined-tlvs](#)

**String Length** 27 to 9190

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### version *number*

**Description** The value indicates the version of the ISIS protocol that has generated the LSP

**Context** [network-instance name string protocols isis instance name string level-database level-number number lsp-id string version number](#)

**Tree** [version](#)

**Configurable** False

**Platforms** Supported on 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e platforms

### loopfree-alternate

**Description** Loopfree-alternate related context for the instance.

**Context** [network-instance name string protocols isis instance name string loopfree-alternate](#)

**Tree** [loopfree-alternate](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set, loopfree-alternate protection is enabled for the ISIS instance. Enables ability to seek for LFA, doesn't guarantee LFA protection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**augment-route-table** *boolean*

<b>Description</b>	Extend remote LFA next-hop resolution path entry to RTM such that tunnel can be used in SPF decisions
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate augment-route-table</a> <i>boolean</i>
<b>Tree</b>	<a href="#">augment-route-table</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**exclude**

<b>Description</b>	Set the exclude context for LFA SPF computation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate exclude</a>
<b>Tree</b>	<a href="#">exclude</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**prefix-policy** *reference*

<b>Description</b>	Policy to exclude prefixes from LFA SPF calculation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate exclude prefix-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**multi-homed-prefix**

<b>Description</b>	Multi-homed-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate multi-homed-prefix</a>
<b>Tree</b>	<a href="#">multi-homed-prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set, multi-homed prefix context is enabled for the ISIS instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate multi-homed-prefix admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**preference** *keyword*

<b>Description</b>	Backup preference of a multi-homed prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate multi-homed-prefix preference</a> <i>keyword</i>
<b>Tree</b>	<a href="#">preference</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• all</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-lfa**

<b>Description</b>	Remote LFA context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa</a>
<b>Tree</b>	<a href="#">remote-lfa</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set, remote lfa protection is enabled for the ISIS instance. Enables ability to seek for an eligible remote-LFA node (P,Q intersection), doesn't guarantee existence of remote-LFA protection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-pq-cost** *number*

<b>Description</b>	Maximum cost of destination node during reverse SPF calculation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa max-pq-cost</a> <i>number</i>
<b>Tree</b>	<a href="#">max-pq-cost</a>
<b>Default</b>	4261412864
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-protect**

<b>Description</b>	Node protect context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa node-protect</a>
<b>Tree</b>	<a href="#">node-protect</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set, the IS-IS instance enables node protection using remote lfa. Remote LFA seeks for a viable P,Q intersection that can protect against node failures.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa node-protect admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-pq-nodes** *number*

<b>Description</b>	Maximum number of PQ nodes found in the LFA SPF. Value 0 disables node protect
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate remote-lfa node-protect max-pq-nodes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-pq-nodes</a>
<b>Range</b>	0 to 32
<b>Default</b>	16
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ti-lfa**

<b>Description</b>	ti-lfa context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate ti-lfa</a>
<b>Tree</b>	<a href="#">ti-lfa</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set, ti-lfa protection is enabled for the ISIS instance. ti-LFA seeks for a viable P,Q intersection based on constraints including max ti-lfa labels.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate ti-lfa admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-sr-policy-lfa-labels** *number*

<b>Description</b>	Maximum number of labels the TI-LFA backup path can use
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate ti-lfa max-sr-policy-lfa-labels</a> <i>number</i>
<b>Tree</b>	<a href="#">max-sr-policy-lfa-labels</a>
<b>Range</b>	0 to 3
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-protect**

<b>Description</b>	Node-protect context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate ti-lfa node-protect</a>
<b>Tree</b>	<a href="#">node-protect</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	When set to enabled, the IS-IS instance enables ti-lfa node protection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">loopfree-alternate ti-lfa node-protect admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"><li>• enable</li><li>• disable</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-ecmp-paths** *number*

<b>Description</b>	The maximum number of ECMP next-hops to program into the FIB for every IP prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">max-ecmp-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-paths</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**net** *string*

<b>Description</b>	ISIS network entity title (NET)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">net</a> <i>string</i>
<b>Tree</b>	<a href="#">net</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

**oper-area-id** *string*

<b>Description</b>	The list of area IDs associated with this IS router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">oper-area-id</a> <i>string</i>
<b>Tree</b>	<a href="#">oper-area-id</a>
<b>String Length</b>	2 to 38
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	The value of the this object indicates the operational state of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>

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<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-system-id** *string*

<b>Description</b>	The ID for this instance of the Integrated IS-IS protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">oper-system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">oper-system-id</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**overload**

<b>Description</b>	Specifies isis routing instance behavior regarding overload
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload</a>
<b>Tree</b>	<a href="#">overload</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-external** *boolean*

<b>Description</b>	When set to true, external (non-ISIS) routes continue to be advertised when the router is in overload.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload</a> <a href="#">advertise-external</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-external</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-interlevel** *boolean*

<b>Description</b>	When set to true, L1->L2 and L2->L1 inter-level routes continue to be advertised when the router is in overload.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload</a> <a href="#">advertise-interlevel</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-interlevel</a>
<b>Default</b>	false



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### immediate

<b>Description</b>	Options for advertising an overloaded state immediately
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload immediate</a>
<b>Tree</b>	<a href="#">immediate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### max-metric *boolean*

<b>Description</b>	When set to true transit links are advertised with a wide metric of 0xfffffe and a narrow metric of 0x3f
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload immediate max-metric</a> <i>boolean</i>
<b>Tree</b>	<a href="#">max-metric</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### set-bit *boolean*

<b>Description</b>	When set to true, the Overload bit is set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload immediate set-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">set-bit</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### instance-is-in-overload *boolean*

<b>Description</b>	When set to true the IS-IS instance is currently in overload state.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload instance-is-in-overload</a> <i>boolean</i>
<b>Tree</b>	<a href="#">instance-is-in-overload</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**on-boot**

<b>Description</b>	Options for advertising an overloaded state whenever the IS-IS process restarts
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload on-boot</a>
<b>Tree</b>	<a href="#">on-boot</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-metric** *boolean*

<b>Description</b>	When set to true transit links are advertised with a wide metric of 0xfffffe and a narrow metric of 0x3f
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload on-boot max-metric</a> <i>boolean</i>
<b>Tree</b>	<a href="#">max-metric</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**set-bit** *boolean*

<b>Description</b>	When set to true, the Overload bit is set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload on-boot set-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">set-bit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**timeout** *number*

<b>Description</b>	Specifies the time that the router should remain in overload state after the IS-IS process restarts
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">overload on-boot timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	60 to 1800
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**poi-tlv** *boolean*

<b>Description</b>	When set to true, a TLV is added to purge to record the system ID of the IS generating the purge.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">poi-tlv</a> <i>boolean</i>
<b>Tree</b>	<a href="#">poi-tlv</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**restarting-neighbor-list**

<b>Description</b>	The list of neighbors that have restarted recently and that are currently being helped.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">restarting-neighbor-list</a>
<b>Tree</b>	<a href="#">restarting-neighbor-list</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor** [system-id](#) *string*

<b>Description</b>	The list of neighbors that have restarted recently and that are currently being helped.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">restarting-neighbor-list neighbor system-id</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system-id** *string*

<b>Description</b>	The neighbor router's system ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">restarting-neighbor-list neighbor system-id</a> <i>string</i>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**hostname** *string*

<b>Description</b>	The hostname of the neighbor, as learned by TLV 137.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">restarting-neighbor-list neighbor system-id</a> <i>string</i> <a href="#">hostname</a> <i>string</i>
<b>Tree</b>	<a href="#">hostname</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**segment-routing**

<b>Description</b>	Enter the segment-routing context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing</a>
<b>Tree</b>	<a href="#">segment-routing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls**

<b>Description</b>	Context used to configure SR-MPLS options
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **adjacency-sid-hold-time** (*keyword* | *number*)

<b>Description</b>	Timer to maintain the operational state of the adjacency SID following a failure of the adjacency.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls adjacency-sid-hold-time</a> ( <i>keyword</i>   <i>number</i> )
<b>Tree</b>	<a href="#">adjacency-sid-hold-time</a>
<b>Range</b>	1 to 300
<b>Default</b>	15
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dynamic-adjacency-sids**

<b>Description</b>	Enter the dynamic-adjacency-sids context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls dynamic-adjacency-sids</a>
<b>Tree</b>	<a href="#">dynamic-adjacency-sids</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **all-interfaces** *boolean*

<b>Description</b>	When true, IS-IS is instructed to assign a dynamic adjacency SID to all IS-IS interfaces in all levels, except for the interfaces configured with an adjacency SID assignment of 'none' or 'static'.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls dynamic-adjacency-sids all-interfaces</a> <i>boolean</i>
<b>Tree</b>	<a href="#">all-interfaces</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entropy-label

<b>Description</b>	Options for configuring control and data plane aspects of entropy label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls entropy-label</a>
<b>Tree</b>	<a href="#">entropy-label</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertise-capability *boolean*

<b>Description</b>	Advertise the Entropy Label Capability
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls entropy-label advertise-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-capability</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## transmit *keyword*

<b>Description</b>	Specify conditions for adding ELI/EL when pushing isis label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls entropy-label transmit</a> <i>keyword</i>
<b>Tree</b>	<a href="#">transmit</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-sid-depth

<b>Description</b>	<p>Container to configure advertise multiple types of Maximum SID Depths (MSDs).</p> <p>maximum-sid-depth advertisements allow entities (e.g., centralized controllers) to determine whether a particular Segment ID (SID) stack can be supported in a given network</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls maximum-sid-depth</a>
<b>Tree</b>	<a href="#">maximum-sid-depth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### override-bmi *number*

<b>Description</b>	Value to override the announced node MSD-BMI value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls maximum-sid-depth override-bmi</a> <i>number</i>
<b>Tree</b>	<a href="#">override-bmi</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### override-erld *number*

<b>Description</b>	Value to override the announced node MSD-ERLD value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls maximum-sid-depth override-erld</a> <i>number</i>
<b>Tree</b>	<a href="#">override-erld</a>
<b>Range</b>	0 to 14
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-database**

<b>Description</b>	Database of all prefix SIDs associated with the IS-IS instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database</a>
<b>Tree</b>	<a href="#">sid-database</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid** [prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value](#) *number* [multi-topology-id](#) *number* [algorithm](#) *number*

<b>Description</b>	List of prefix SIDs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix) sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** ([ipv4-prefix](#) | [ipv6-prefix](#))

<b>Description</b>	The IPv4 or IPv6 prefix associated with the SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix) sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-label-value** *number*

<b>Description</b>	The MPLS label value associated with the SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix) sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Range</b>	16 to 1048575



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multi-topology-id *number*

<b>Description</b>	The multi-topology ID that provided the prefix SID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Range</b>	0 to 4095
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### algorithm *number*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active *boolean*

<b>Description</b>	When false, the prefix SID is inactive. It could be inactive for any of these reasons:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-conflict** *boolean*

<b>Description</b>	Reads true when the prefix SID entry is involved in a prefix conflict within the scope of this IS-IS instance. This occurs when there are multiple entries for the same (prefix, multi-topology-id, algorithm). All the conflicting entries become inactive except for the one with the smallest sid-index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">prefix-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-conflict** *boolean*

<b>Description</b>	Reads true when the prefix SID entry is involved in a SID conflict within the scope of this IS-IS instance. This occurs when the same SID has been assigned to different prefixes after first eliminating entries that have lost the prefix-conflict comparison. All entries involved in a SID conflict that do not have the absolute lowest 'preference' value become inactive. In the SRL implementation SID entries associated with interfaces of this IS-IS instance are considered to have a lower numerical preference than remote prefix-sid entries. If there are still SID conflicts then all the remaining conflicting entries become inactive except for the one with the smallest sid-index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">sid-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sid-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-out-of-range** *boolean*

<b>Description</b>	Reads true when a received prefix SID from another router has a SID index or label value that is not within the locally defined SRGB range of the network instance; the prefix SID entry will be inactive.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-</a>

	<a href="#">value</a> <a href="#">number</a> <a href="#">multi-topology-id</a> <a href="#">number</a> <a href="#">algorithm</a> <a href="#">number</a> <a href="#">sid-out-of-range</a> <a href="#">boolean</a>
<b>Tree</b>	<a href="#">sid-out-of-range</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-router** [system-id](#) [string](#) [level-number](#) [number](#)

<b>Description</b>	The ISIS routers that provided the prefix SID. (Multiple in the case of redistribution.)
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">mpls</a> <a href="#">sid-database</a> <a href="#">prefix-sid</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">sid-label-value</a> <a href="#">number</a> <a href="#">multi-topology-id</a> <a href="#">number</a> <a href="#">algorithm</a> <a href="#">number</a> <a href="#">source-router</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">level-number</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">source-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-id** [string](#)

<b>Description</b>	The system-id of an ISIS router that originated or redistributed the prefix SID
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">mpls</a> <a href="#">sid-database</a> <a href="#">prefix-sid</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">sid-label-value</a> <a href="#">number</a> <a href="#">multi-topology-id</a> <a href="#">number</a> <a href="#">algorithm</a> <a href="#">number</a> <a href="#">source-router</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">level-number</a> <a href="#">number</a>
<b>String Length</b>	14
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **level-number** [number](#)

<b>Description</b>	The level of the LSP that advertises the prefix SID
<b>Context</b>	<a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">isis</a> <a href="#">instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">mpls</a> <a href="#">sid-database</a> <a href="#">prefix-sid</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">sid-label-value</a> <a href="#">number</a> <a href="#">multi-topology-id</a> <a href="#">number</a> <a href="#">algorithm</a> <a href="#">number</a> <a href="#">source-router</a> <a href="#">system-id</a> <a href="#">string</a> <a href="#">level-number</a> <a href="#">number</a>
<b>Range</b>	1 to 2

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## flags

<b>Description</b>	Flags that characterize the prefix SID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">source-router system-id</a> <i>string</i> <a href="#">level-number</a> <i>number</i> <a href="#">flags</a>
<b>Tree</b>	<a href="#">flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## explicit-null *boolean*

<b>Description</b>	If set any upstream neighbor of the Prefix-SID originator MUST replace the Prefix-SID with a Prefix-SID that has an Explicit NULL value (0 for IPv4 and 2 for IPv6) before forwarding the packet
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">source-router system-id</a> <i>string</i> <a href="#">level-number</a> <i>number</i> <a href="#">flags</a> <a href="#">explicit-null</a> <i>boolean</i>
<b>Tree</b>	<a href="#">explicit-null</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local *boolean*

<b>Description</b>	If set, then the value/index carried by the Prefix-SID has local significance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">source-router system-id</a> <i>string</i> <a href="#">level-number</a> <i>number</i> <a href="#">flags</a> <a href="#">local</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### node-sid *boolean*

**Description** If set the prefix SID refers to the router identified by the prefix.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value number](#) [multi-topology-id number](#) [algorithm number](#) [source-router system-id string](#) [level-number number](#) [flags node-sid boolean](#)

**Tree** [node-sid](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### penultimate-hop-popping *boolean*

**Description** If set the penultimate hop MUST NOT pop the Prefix-SID before delivering the packet to the node that advertised the Prefix-SID.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value number](#) [multi-topology-id number](#) [algorithm number](#) [source-router system-id string](#) [level-number number](#) [flags penultimate-hop-popping boolean](#)

**Tree** [penultimate-hop-popping](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### re-advertised *boolean*

**Description** If set the prefix to which this Prefix-SID is attached was propagated from another level or from another protocol.

**Context** [network-instance name string](#) [protocols isis instance name string](#) [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value number](#) [multi-topology-id number](#) [algorithm number](#) [source-router system-id string](#) [level-number number](#) [flags re-advertised boolean](#)

**Tree** [re-advertised](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-system** *boolean*

<b>Description</b>	True when the system ID belongs to the local system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">multi-topology-id</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">source-router system-id</a> <i>string</i> <a href="#">level-number</a> <i>number</i> <a href="#">local-system</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local-system</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static-label-block** *reference*

<b>Description</b>	Reference to a static label block to use an SRLB. Configuration of this label block is mandatory in order to assign static adjacency SID labels. This label block is advertised as an SRLB in the router capabilities TLV.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls static-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">static-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static-label-block-status** *keyword*

<b>Description</b>	Status of the label block. The label block may show as unavailable if there is pending cleanup.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">segment-routing mpls static-label-block-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">static-label-block-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>available</li> <li>unavailable</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Instance level statistics

**Context** [network-instance name string protocols isis instance name string statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** Supported on all platforms

## last-partial-spf *string*

**Description** The elapsed time since the last time a partial SPF run was run on either the L1 or L2 LSDB

**Context** [network-instance name string protocols isis instance name string statistics last-partial-spf string](#)

**Tree** [last-partial-spf](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

## last-spf *string*

**Description** The elapsed time since the last time a full SPF run was run on either the L1 or L2 LSDB

**Context** [network-instance name string protocols isis instance name string statistics last-spf string](#)

**Tree** [last-spf](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

**partial-spf-runs** *number*

<b>Description</b>	The number of times a partial SPF run has been performed on either the L1 or L2 LSDB since the IS-IS manager restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">statistics partial-spf-runs</a> <i>number</i>
<b>Tree</b>	<a href="#">partial-spf-runs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pdu** [pdu-name](#) *keyword*

<b>Description</b>	List of PDUs processed by the IS-IS instance since the IS-IS manager restarted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">statistics pdu pdu-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pdu</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pdu-name** *keyword*

<b>Description</b>	The PDU type that was processed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">statistics pdu pdu-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• LSP Link State PDU</li> <li>• IIH IS-to-IS Hello PDU</li> <li>• CSNP Complete Sequence Number PDU</li> <li>• PSNP Partial Sequence Number PDU</li> <li>• Unknown Unknown PDU type</li> </ul>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **dropped** *number*

**Description** The number of PDUs that were received and dropped

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [statistics pdu pdu-name](#) *keyword* [dropped](#) *number*

**Tree** [dropped](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **processed** *number*

**Description** The number of PDUs that were received and processed

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [statistics pdu pdu-name](#) *keyword* [processed](#) *number*

**Tree** [processed](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **received** *number*

**Description** The number of PDUs that were received

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [statistics pdu pdu-name](#) *keyword* [received](#) *number*

**Tree** [received](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **sent** *number*

**Description** The number of PDUs that were transmitted

**Context** [network-instance name](#) *string* [protocols isis instance name](#) *string* [statistics pdu pdu-name](#) *keyword* [sent](#) *number*

<b>Tree</b>	<a href="#">sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### spf-runs *number*

<b>Description</b>	The number of times a full SPF run has been performed on either the L1 or L2 LSDB since the IS-IS manager restarted
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string statistics spf-runs number</a>
<b>Tree</b>	<a href="#">spf-runs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### te-database-install

<b>Description</b>	When present, topology and TE information related to this protocol instance is installed into the TE database
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string te-database-install</a>
<b>Tree</b>	<a href="#">te-database-install</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bgp-ls

<b>Description</b>	When present, topology and TE information related to this protocol instance is installed into the TE database in a format that supports export as BGP-LS routes
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string te-database-install bgp-ls</a>
<b>Tree</b>	<a href="#">bgp-ls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-ls-identifier** *number*

<b>Description</b>	BGP-LS identifier value that is sent in the BGP-LS NLRI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">te-database-install bgp-ls bgp-ls-identifier</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-ls-identifier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**igp-identifier** *number*

<b>Description</b>	Unique identifier of the IGP instance that is sent in the BGP-LS NLRI
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">te-database-install bgp-ls igp-identifier</a> <i>number</i>
<b>Tree</b>	<a href="#">igp-identifier</a>
<b>Range</b>	0 to 18446744073709551615
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timers**

<b>Description</b>	Container for IS-IS timers applicable at the instance level
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers</a>
<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lsp-generation**

<b>Description</b>	Container with options for specifying LSP generation timer values
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-generation</a>
<b>Tree</b>	<a href="#">lsp-generation</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**initial-wait number**

<b>Description</b>	Time interval between the detection of topology change and when the new LSP is generated.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string timers lsp-generation initial-wait number</a>
<b>Tree</b>	<a href="#">initial-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	10
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-wait number**

<b>Description</b>	Specifies the maximum interval between two consecutive generations of an LSP.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string timers lsp-generation max-wait number</a>
<b>Tree</b>	<a href="#">max-wait</a>
<b>Range</b>	10 to 120000
<b>Default</b>	5000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**second-wait number**

<b>Description</b>	Time interval between the the first and second LSP generation.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-generation</a> <i>second-wait</i> <i>number</i>
<b>Tree</b>	<a href="#">second-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	1000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **Isp-lifetime** *number*

<b>Description</b>	Time interval in seconds that the LSPs originated by this IS (router) remain valid in the LSDB before they must be refreshed or else they are purged.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-lifetime</a> <i>number</i>
<b>Tree</b>	<a href="#">lsp-lifetime</a>
<b>Range</b>	350 to 65535
<b>Default</b>	1200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **Isp-refresh**

<b>Description</b>	Configure LSP refresh timers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-refresh</a>
<b>Tree</b>	<a href="#">lsp-refresh</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **half-lifetime** *boolean*

<b>Description</b>	When set to true, the LSP refresh interval is half the lsp-lifetime
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-refresh</a> <a href="#">half-lifetime</a> <i>boolean</i>
<b>Tree</b>	<a href="#">half-lifetime</a>

<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **interval** *number*

<b>Description</b>	Time interval in seconds since the last advertisement of its LSP when the router attempts to refresh the LSP. Must not exceed 90% of the lsp-lifetime. This value is ignored when half-lifetime is set to true.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers lsp-refresh interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	150 to 65535
<b>Default</b>	600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **spf**

<b>Description</b>	Container with options for specifying SPF timer values
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers spf</a>
<b>Tree</b>	<a href="#">spf</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **initial-wait** *number*

<b>Description</b>	Time interval between the detection of topology change and when the SPF algorithm runs.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">timers spf initial-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">initial-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	1000

<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-wait number**

<b>Description</b>	Specifies the maximum interval between two consecutive SPF calculations in milliseconds.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string timers spf max-wait number</a>
<b>Tree</b>	<a href="#">max-wait</a>
<b>Range</b>	10 to 120000
<b>Default</b>	10000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**second-wait number**

<b>Description</b>	Time interval between the the first and second SPF run.  The timer granularity is 100 ms. Timer values are rounded down to the nearest granularity, for example a configured value of 550 ms is internally rounded down to 500 ms
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string timers spf second-wait number</a>
<b>Tree</b>	<a href="#">second-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	1000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## trace-options

<b>Description</b>	Instance level debug trace options for IS-IS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## trace *keyword*

<b>Description</b>	List of tracing options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">adjacencies</a></li> <li>• <a href="#">graceful-restart</a></li> <li>• <a href="#">interfaces</a></li> <li>• <a href="#">packets-all</a></li> <li>• <a href="#">packets-p2p-hello</a></li> <li>• <a href="#">packets-l1-hello</a></li> <li>• <a href="#">packets-l2-hello</a></li> <li>• <a href="#">packets-l1-psnp</a></li> <li>• <a href="#">packets-l2-psnp</a></li> <li>• <a href="#">packets-l1-csnp</a></li> <li>• <a href="#">packets-l2-csnp</a></li> <li>• <a href="#">packets-l1-lsp</a></li> <li>• <a href="#">packets-l2-lsp</a></li> <li>• <a href="#">routes</a></li> <li>• <a href="#">summary-addresses</a></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## traffic-engineering

<b>Description</b>	container for traffic engineering information
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">traffic-engineering</a>
<b>Tree</b>	<a href="#">traffic-engineering</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **advertisement** *boolean*

<b>Description</b>	A setting of false means that no TE-related TLVs and subTLVs should be added to LSAs or LSPs originated by this IGP instance. A setting of true means that TE-related TLVs and subTLVs should be added to LSAs or LSPs originated by this IGP instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">traffic-engineering advertisement</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertisement</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-te-router-id** *string*

<b>Description</b>	<p>A routable IPv4 address to identify the router uniquely in a TE domain. TLV = 134.</p> <p>The <code>ipv4-te-router-id</code> contains the 4-octet router ID of the router originating the LSP. The <code>ipv4-te-router-id</code> guarantees a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.</p> <p>The configured <code>ipv4-te-router-id</code> address must be active and reachable within the routing instance and must be associated to either a system or loopback interface. The state value represents the operational advertised of <code>ipv4-te-router-id</code>.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">traffic-engineering ipv4-te-router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-te-router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-te-router-id** *string*

<b>Description</b>	<p>A routable IPv6 address to identify the router uniquely in a TE domain. TLV = 140.</p> <p>The ipv6-te-router-id contains the 4-octet router ID of the router originating the LSP. The ipv6-te-router-id guarantees a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.</p> <p>The configured ipv6-te-router-id address must be active and reachable within the routing instance and must be associated to either a system or loopback interface. The state value represents the operational advertised of ipv6-te-router-id</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">traffic-engineering ipv6-te-router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-te-router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**legacy-link-attribute-advertisement** *boolean*

<b>Description</b>	<p>The advertisement mode for TE link attributes.</p> <p>A setting of true means that TE properties should be advertised in legacy mode as defined in RFC 8919 and RFC 8920.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">traffic-engineering legacy-link-attribute-advertisement</a> <i>boolean</i>
<b>Tree</b>	<a href="#">legacy-link-attribute-advertisement</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transport**

<b>Description</b>	Enter the transport context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lsp-mtu-size** *number*

<b>Description</b>	Sets the maximum size of LSPs generated by this router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">transport lsp-mtu-size</a> <i>number</i>
<b>Tree</b>	<a href="#">lsp-mtu-size</a>
<b>Range</b>	490 to 9490
<b>Default</b>	1492
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**weighted-ecmp**

<b>Description</b>	Enter the weighted-ecmp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">weighted-ecmp</a>
<b>Tree</b>	<a href="#">weighted-ecmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**admin-state** *keyword*

<b>Description</b>	<p>Setting enable triggers weighted ECMP programming for all eligible multipath IS-IS routes associated with the instance</p> <p>An IS-IS route is eligible for weighted ECMP if all the next-hop interfaces in the multipath set have a load-balancing-weight other than 'none'.</p> <p>When weighted ECMP is disabled in an IS-IS instance all IS-IS multipath routes are programmed as normal ECMP, even if some or all of the next-hop interfaces in any particular multipath set have a load-balancing-weight other than 'none'.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">weighted-ecmp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **max-ecmp-hash-buckets-per-next-hop-group** *number*

<b>Description</b>	Specifies the maximum number of ECMP hash buckets per next-hop-group. Weighted ECMP weights are normalized based on this number of hash buckets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">weighted-ecmp max-ecmp-hash-buckets-per-next-hop-group</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-hash-buckets-per-next-hop-group</a>
<b>Range</b>	1 to 256
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **non-stop-forwarding**

<b>Description</b>	Enter the non-stop-forwarding context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis non-stop-forwarding</a>
<b>Tree</b>	<a href="#">non-stop-forwarding</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Used to administratively enable or disable the IS-IS non-stop forwarding functionality.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis non-stop-forwarding admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ldp

<b>Description</b>	Container for LDP configuration and state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp</a>
<b>Tree</b>	<a href="#">ldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable LDP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## discovery

<b>Description</b>	Neighbor discovery configuration and operational state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a>
<b>Tree</b>	<a href="#">discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interfaces**

<b>Description</b>	The complete set of interfaces used for LDP Basic Discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-holdtime** *number*

<b>Description</b>	The time interval for which a LDP Hello adjacency is maintained in the absence of Hello messages from the LDP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces hello-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Range</b>	15 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	The interval between consecutive LDP Hello messages used in LDP discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	5 to 1200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *name string*

<b>Description</b>	List of LDP interfaces used for LDP Basic Discovery
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Reference to a specific subinterface that is bound to the network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-holdtime** *number*

<b>Description</b>	The time interval for which a LDP Hello adjacency is maintained in the absence of Hello messages from the LDP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">hello-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Range</b>	15 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	The interval between consecutive LDP Hello messages used in LDP discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	5 to 1200

<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <i>ipv4</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable LDP discovery for IPv4 on a particular interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## enable-bfd *boolean*

<b>Description</b>	Enable BFD
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-adjacencies

**Description** Container with a list of hello adjacencies

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 hello-adjacencies](#)

**Tree** [hello-adjacencies](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## adjacency [lsr-id reference](#) [label-space-id reference](#)

**Description** List of hello adjacencies

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 hello-adjacencies adjacency lsr-id reference](#) [label-space-id reference](#)

**Tree** [adjacency](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## lsr-id reference

**Description** The LSR ID of the peer, as a portion of the peer LDP ID

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 hello-adjacencies adjacency lsr-id reference](#) [label-space-id reference](#)

**Reference** [network-instance name](#) *string* [protocols ldp peers peer lsr-id \(ipv4-address-unicast | ipv6-address-unicast-without-local\)](#) [label-space-id number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## label-space-id reference

**Description** The Label Space ID of the peer, as a portion of the peer LDP ID

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-holdtime

<b>Description</b>	Container for hello holdtime state information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime</a>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## negotiated *number*

<b>Description</b>	The holdtime negotiated between this LSR and the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime negotiated</a> <i>number</i>
<b>Tree</b>	<a href="#">negotiated</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor-proposed *number*

<b>Description</b>	The holdtime value learned from the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime neighbor-proposed</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-proposed</a>

<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remaining** *number*

<b>Description</b>	The time remaining until the holdtime timer expires
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime remaining</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-received** *number*

<b>Description</b>	The number of Hello messages received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-received</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-sent** *number*

<b>Description</b>	The number of Hello messages sent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-address *string*

**Description** Local address of the hello adjacency

**Context** [network-instance name \*string\*](#) [protocols ldp discovery interfaces interface name \*string\*](#) [ipv4 hello-adjacencies adjacency lsr-id \*reference\*](#) [label-space-id \*reference\*](#) [local-address \*string\*](#)

**Tree** [local-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-address *string*

**Description** Remote address of the hello adjacency

**Context** [network-instance name \*string\*](#) [protocols ldp discovery interfaces interface name \*string\*](#) [ipv4 hello-adjacencies adjacency lsr-id \*reference\*](#) [label-space-id \*reference\*](#) [remote-address \*string\*](#)

**Tree** [remote-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### intf-oper-down-reason *keyword*

**Description** Reason for the LDP interface being down

**Context** [network-instance name \*string\*](#) [protocols ldp discovery interfaces interface name \*string\*](#) [ipv4 intf-oper-down-reason \*keyword\*](#)

**Tree** [intf-oper-down-reason](#)

**Options**

- ldp-interface-admin-down
- ldp-instance-oper-down
- network-instance-subinterface-down
- out-of-resources
- unknown

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-oper-state-change *string*

**Description** The last time when the IPv4 oper-state changed

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv4 last-oper-state-change \*string\*](#)

**Tree** [last-oper-state-change](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

**Description** Operational state of IPv4 on the LDP interface

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv4 oper-state \*keyword\*](#)

**Tree** [oper-state](#)

**Options**

- up
- down

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### override-lsr-id

**Description** Options to override the LSR ID

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv4 override-lsr-id](#)

**Tree** [override-lsr-id](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-subinterface** *keyword*

<b>Description</b>	Use local subinterface IP address as LSR ID for interface LDP session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 override-lsr-id local-subinterface</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-subinterface</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4</a> Use the IPv4 address of the subinterface as the LSR ID</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Statistics objects
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-message-errors**

<b>Description</b>	Counters for received Hello message errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics hello-message-errors</a>
<b>Tree</b>	<a href="#">hello-message-errors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-message-length** *number*

<b>Description</b>	The number of Hello messages received with a bad message length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics hello-message-errors bad-message-length</a> <i>number</i>

<b>Tree</b>	<a href="#">bad-message-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-pdu-length** *number*

<b>Description</b>	The number of Hello messages received with a bad PDU length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics hello-message-errors bad-pdu-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-pdu-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-protocol-version** *number*

<b>Description</b>	The number of Hello messages received with a bad protocol version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics hello-message-errors bad-protocol-version</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-protocol-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **malformed-tlv-value** *number*

<b>Description</b>	The number of Hello messages received with a malformed TLV value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 statistics hello-message-errors malformed-tlv-value</a> <i>number</i>
<b>Tree</b>	<a href="#">malformed-tlv-value</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-received *number*

**Description** The number of Hello messages received

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 statistics hello-received](#) *number*

**Tree** [hello-received](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-sent *number*

**Description** The number of Hello messages sent

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 statistics hello-sent](#) *number*

**Tree** [hello-sent](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trace-options

**Description** Configure event/packet tracing for one specific LDP interface

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv4 trace-options](#)

**Tree** [trace-options](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trace *keyword*

**Description** Specifies the trace information to be captured



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv4 trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Trace all events and packets</li> <li>• events-discovery Trace session related events</li> <li>• messages-hello Trace Hello packets</li> <li>• messages-hello-detail Trace LDP Hello packets with detailed output</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable LDP discovery for IPv6 on a particular interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### enable-bfd *boolean*

**Description** Enable BFD

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 enable-bfd](#) *boolean*

**Tree** [enable-bfd](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-adjacencies

**Description** Container with a list of hello adjacencies

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 hello-adjacencies](#)

**Tree** [hello-adjacencies](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adjacency [lsr-id](#) *reference* [label-space-id](#) *reference*

**Description** List of hello adjacencies

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 hello-adjacencies adjacency](#) [lsr-id](#) *reference* [label-space-id](#) *reference*

**Tree** [adjacency](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsr-id *reference*

**Description** The LSR ID of the peer, as a portion of the peer LDP ID

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer</a> <a href="#">lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id *reference*

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer</a> <a href="#">lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-holdtime

<b>Description</b>	Container for hello holdtime state information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">hello-holdtime</a>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### negotiated *number*

<b>Description</b>	The holdtime negotiated between this LSR and the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">hello-holdtime</a> <a href="#">negotiated number</a>
<b>Tree</b>	<a href="#">negotiated</a>
<b>Units</b>	seconds

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor-proposed *number*

<b>Description</b>	The holdtime value learned from the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime neighbor-proposed</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-proposed</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remaining *number*

<b>Description</b>	The time remaining until the holdtime timer expires
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime remaining</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-received *number*

<b>Description</b>	The number of Hello messages received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-received</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-sent** *number*

<b>Description</b>	The number of Hello messages sent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <b>hello-sent</b> <i>number</i>
<b>Tree</b>	<a href="#">hello-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** *string*

<b>Description</b>	Local address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <b>local-address</b> <i>string</i>
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** *string*

<b>Description</b>	Remote address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <b>remote-address</b> <i>string</i>
<b>Tree</b>	<a href="#">remote-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**intf-oper-down-reason** *keyword*

<b>Description</b>	Reason for the LDP interface being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 intf-oper-down-reason</a> <i>keyword</i>

<b>Tree</b>	<a href="#">intf-oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ldp-interface-admin-down</a></li> <li>• <a href="#">ldp-instance-oper-down</a></li> <li>• <a href="#">network-instance-subinterface-down</a></li> <li>• <a href="#">out-of-resources</a></li> <li>• <a href="#">unknown</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-oper-state-change** *string*

<b>Description</b>	The last time when the IPv6 oper-state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Operational state of IPv6 on the LDP interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">up</a></li> <li>• <a href="#">down</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **override-lsr-id**

<b>Description</b>	Options to override the LSR ID
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 override-lsr-id</a>
<b>Tree</b>	<a href="#">override-lsr-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-subinterface *keyword*

<b>Description</b>	Use local subinterface IP address as LSR ID for interface LDP session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 override-lsr-id local-subinterface</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-subinterface</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4</a> Use the IPv4 address of the subinterface as the LSR ID</li> <li>• <a href="#">ipv6</a> Use the IPv6 address of the subinterface as the LSR ID</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Statistics objects
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-message-errors

<b>Description</b>	Counters for received Hello message errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 statistics hello-message-errors</a>
<b>Tree</b>	<a href="#">hello-message-errors</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-message-length** *number*

**Description** The number of Hello messages received with a bad message length

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 statistics hello-message-errors bad-message-length](#) *number*

**Tree** [bad-message-length](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-pdu-length** *number*

**Description** The number of Hello messages received with a bad PDU length

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 statistics hello-message-errors bad-pdu-length](#) *number*

**Tree** [bad-pdu-length](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-protocol-version** *number*

**Description** The number of Hello messages received with a bad protocol version

**Context** [network-instance name](#) *string* [protocols ldp discovery interfaces interface name](#) *string* [ipv6 statistics hello-message-errors bad-protocol-version](#) *number*

**Tree** [bad-protocol-version](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**malformed-tlv-value** *number*

<b>Description</b>	The number of Hello messages received with a malformed TLV value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 statistics hello-message-errors malformed-tlv-value</a> <i>number</i>
<b>Tree</b>	<a href="#">malformed-tlv-value</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-received** *number*

<b>Description</b>	The number of Hello messages received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 statistics hello-received</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-sent** *number*

<b>Description</b>	The number of Hello messages sent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 statistics hello-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Configure event/packet tracing for one specific LDP interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces interface name</a> <i>string</i> <a href="#">ipv6 trace-options</a>

<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace keyword**

<b>Description</b>	Specifies the trace information to be captured
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces interface name</a> <i>string</i> <a href="#">ipv6 trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Trace all events and packets</li> <li>• events-discovery Trace session related events</li> <li>• messages-hello Trace Hello packets</li> <li>• messages-hello-detail Trace LDP Hello packets with detailed output</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Configure event/packet tracing for all LDP interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a> <a href="#">interfaces trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace keyword**

<b>Description</b>	Specifies the trace information to be captured
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Trace all events and packets</li> <li>• events-discovery Trace session related events</li> <li>• messages-hello Trace Hello packets</li> <li>• messages-hello-detail Trace LDP Hello packets with detailed output</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## targeted

<b>Description</b>	List of targeted peers for extended discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted</a>
<b>Tree</b>	<a href="#">targeted</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-holdtime *number*

<b>Description</b>	The time interval for which a LDP Hello adjacency is maintained in the absence of Hello messages from the LDP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted hello-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Range</b>	15 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	The interval between consecutive LDP Hello messages used in LDP discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted hello-interval number</a>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	5 to 1200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4**

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**auto-rx**

<b>Description</b>	Auto-rx targeted LDP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-rx</a>
<b>Tree</b>	<a href="#">auto-rx</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable auto-rx targeted LDP adjacencies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-rx admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-fec** *boolean*

<b>Description</b>	Enable advertisement of FECs to auto-rx targets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-rx advertise-fec</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-fec</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**auto-tx**

<b>Description</b>	Auto-tx targeted LDP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-tx</a>
<b>Tree</b>	<a href="#">auto-tx</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable auto-tx targeted LDP adjacencies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-tx admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-fec** *boolean*

<b>Description</b>	Enable advertisement of FECs to auto-tx targets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 auto-tx advertise-fec</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-fec</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**target remote-address** *string*

<b>Description</b>	List of configured targeted LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** *string*

<b>Description</b>	Configuration of neighbor address of the targeted LDP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the targeted LDP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"><li>• enable</li><li>• disable</li></ul>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-fec** *boolean*

<b>Description</b>	Enable advertisement of FECs to target
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">advertise-fec</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-fec</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**enable-bfd** *boolean*

<b>Description</b>	Enable BFD
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-adjacencies**

<b>Description</b>	Container with a list of hello adjacencies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies</a>
<b>Tree</b>	<a href="#">hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**adjacency** [lsr-id](#) *reference* [label-space-id](#) *reference*

<b>Description</b>	List of hello adjacencies
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">adjacency</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsr-id reference

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id reference

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-holdtime

<b>Description</b>	Container for hello holdtime state information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime</a>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**negotiated** *number*

<b>Description</b>	The holdtime negotiated between this LSR and the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime negotiated</a> <i>number</i>
<b>Tree</b>	<a href="#">negotiated</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-proposed** *number*

<b>Description</b>	The holdtime value learned from the adjacent LSR
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime neighbor-proposed</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-proposed</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**remaining** *number*

<b>Description</b>	The time remaining until the holdtime timer expires
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime remaining</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-received** *number*

<b>Description</b>	The number of Hello messages received
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-received</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-sent** *number*

<b>Description</b>	The number of Hello messages sent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** *string*

<b>Description</b>	Local address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">local-address</a> <i>string</i>
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** *string*

<b>Description</b>	Remote address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">remote-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-holdtime** *number*

<b>Description</b>	The time interval for which a LDP Hello adjacency is maintained in the absence of Hello messages from the LDP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Range</b>	15 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	The interval between consecutive LDP Hello messages used in LDP discovery
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	5 to 1200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-oper-state-change** *string*

<b>Description</b>	The last time when the adjacency oper-state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the targeted LDP adjacency
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up</li> <li>• down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-type** *keyword*

<b>Description</b>	The value indicates the operational type of this targeted LDP session. Session creation can be triggered by a service or can be manually configured as an example. A session that is originally triggered by service configuration may change to a manual session.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">oper-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• manual</li> <li>• service</li> <li>• auto-tx</li> <li>• auto-rx</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **override-lsr-id**

<b>Description</b>	Options to override the LSR ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">override-lsr-id</a>
<b>Tree</b>	<a href="#">override-lsr-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subinterface-ipv4** *string*

<b>Description</b>	Set to use configured subinterface IPv4 address as LSR ID for Targeted LDP session
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Configured sub-interface must either be an LDP or a loopback interface.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">override-lsr-id subinterface-ipv4</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface-ipv4</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Statistics objects
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-message-errors

<b>Description</b>	Counters for received Hello message errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors</a>
<b>Tree</b>	<a href="#">hello-message-errors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## bad-message-length *number*

<b>Description</b>	The number of Hello messages received with a bad message length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors bad-message-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-message-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-pdu-length** *number*

<b>Description</b>	The number of Hello messages received with a bad PDU length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors bad-pdu-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-pdu-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-protocol-version** *number*

<b>Description</b>	The number of Hello messages received with a bad protocol version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors bad-protocol-version</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-protocol-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**malformed-tlv-value** *number*

<b>Description</b>	The number of Hello messages received with a malformed TLV value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors malformed-tlv-value</a> <i>number</i>
<b>Tree</b>	<a href="#">malformed-tlv-value</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**target-oper-down-reason** *keyword*

<b>Description</b>	Reason for the targeted LDP adjacency being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">target-oper-down-reason</a> <i>keyword</i>

<b>Tree</b>	<a href="#">target-oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">target-admin-down</a></li> <li>• <a href="#">ldp-instance-oper-down</a></li> <li>• <a href="#">out-of-resources</a></li> <li>• <a href="#">unknown</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">discovery</a> <a href="#">targeted</a> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## target [remote-address](#) *string*

<b>Description</b>	List of configured targeted LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">discovery</a> <a href="#">targeted</a> <a href="#">ipv6</a> <a href="#">target</a> <a href="#">remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## remote-address *string*

<b>Description</b>	Configuration of IPv6 neighbor address of the targeted LDP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">discovery</a> <a href="#">targeted</a> <a href="#">ipv6</a> <a href="#">target</a> <a href="#">remote-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the targeted LDP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-fec** *boolean*

<b>Description</b>	Enable advertisement of FECs to target
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <b>advertise-fec</b> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-fec</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**enable-bfd** *boolean*

<b>Description</b>	Enable BFD
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <b>enable-bfd</b> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-adjacencies**

<b>Description</b>	Container with a list of hello adjacencies
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies</a>
<b>Tree</b>	<a href="#">hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **adjacency** [lsr-id reference](#) [label-space-id reference](#)

<b>Description</b>	List of hello adjacencies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id reference label-space-id reference</a>
<b>Tree</b>	<a href="#">adjacency</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lsr-id reference**

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id reference label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label-space-id reference**

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id reference label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">label-space-id number</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-holdtime

**Description** Container for hello holdtime state information

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [hello-adjacencies adjacency lsr-id](#) *reference* [label-space-id](#) *reference* [hello-holdtime](#)

**Tree** [hello-holdtime](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## negotiated *number*

**Description** The holdtime negotiated between this LSR and the adjacent LSR

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [hello-adjacencies adjacency lsr-id](#) *reference* [label-space-id](#) *reference* [hello-holdtime negotiated](#) *number*

**Tree** [negotiated](#)

**Units** seconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor-proposed *number*

**Description** The holdtime value learned from the adjacent LSR

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [hello-adjacencies adjacency lsr-id](#) *reference* [label-space-id](#) *reference* [hello-holdtime neighbor-proposed](#) *number*

**Tree** [neighbor-proposed](#)

**Units** seconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remaining *number*

<b>Description</b>	The time remaining until the holdtime timer expires
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-holdtime remaining</a> <i>number</i>
<b>Tree</b>	<a href="#">remaining</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-received *number*

<b>Description</b>	The number of Hello messages received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-received</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-sent *number*

<b>Description</b>	The number of Hello messages sent
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">hello-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** *string*

<b>Description</b>	Local address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">local-address</a> <i>string</i>
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** *string*

<b>Description</b>	Remote address of the hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-adjacencies adjacency lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">remote-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-holdtime** *number*

<b>Description</b>	The time interval for which a LDP Hello adjacency is maintained in the absence of Hello messages from the LDP neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-holdtime</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-holdtime</a>
<b>Range</b>	15 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	The interval between consecutive LDP Hello messages used in LDP discovery
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	5 to 1200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-oper-state-change** *string*

<b>Description</b>	The last time when the adjacency oper-state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Operational state of the targeted LDP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up</li> <li>• down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-type** *keyword*

<b>Description</b>	The value indicates the operational type of this targeted LDP session. Session creation can be triggered by a service or can be manually configured as an example. A session that is originally triggered by service configuration may change to a manual session.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">oper-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• manual</li> <li>• service</li> <li>• auto-tx</li> <li>• auto-rx</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**override-lsr-id**

<b>Description</b>	Options to override the LSR ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">override-lsr-id</a>
<b>Tree</b>	<a href="#">override-lsr-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface-ipv4** *string*

<b>Description</b>	Set to use configured subinterface IPv4 address as LSR ID for Targeted LDP session Configured sub-interface must either be an LDP or a loopback interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">override-lsr-id</a> <a href="#">subinterface-ipv4</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface-ipv4</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface-ipv6** *string*

<b>Description</b>	Set to use configured subinterface IPv6 address as LSR ID for Targeted LDP session
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Configured sub-interface must either be an LDP or a loopback interface.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">override-lsr-id subinterface-ipv6</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface-ipv6</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Statistics objects
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hello-message-errors

<b>Description</b>	Counters for received Hello message errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors</a>
<b>Tree</b>	<a href="#">hello-message-errors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bad-message-length *number*

<b>Description</b>	The number of Hello messages received with a bad message length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">statistics hello-message-errors bad-message-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-message-length</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-pdu-length** *number*

**Description** The number of Hello messages received with a bad PDU length

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [statistics hello-message-errors bad-pdu-length](#) *number*

**Tree** [bad-pdu-length](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-protocol-version** *number*

**Description** The number of Hello messages received with a bad protocol version

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [statistics hello-message-errors bad-protocol-version](#) *number*

**Tree** [bad-protocol-version](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **malformed-tlv-value** *number*

**Description** The number of Hello messages received with a malformed TLV value

**Context** [network-instance name](#) *string* [protocols ldp discovery targeted ipv6 target remote-address](#) *string* [statistics hello-message-errors malformed-tlv-value](#) *number*

**Tree** [malformed-tlv-value](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**target-oper-down-reason** *keyword*

<b>Description</b>	Reason for the targeted LDP adjacency being down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">target-oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">target-oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• target-admin-down</li> <li>• ldp-instance-oper-down</li> <li>• out-of-resources</li> <li>• unknown</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dynamic-label-block** *reference*

<b>Description</b>	Reference to a dynamic label block
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp dynamic-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">dynamic-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dynamic-label-block-status** *keyword*

<b>Description</b>	<p>Status of the label block</p> <p>The label block may show as unavailable if there is pending cleanup</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp dynamic-label-block-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">dynamic-label-block-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• available</li> <li>• unavailable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entropy-label**

<b>Description</b>	Options for configuring control and data plane aspects of entropy label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp entropy-label</a>
<b>Tree</b>	<a href="#">entropy-label</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertise-capability** *boolean*

<b>Description</b>	Advertise the Entropy Label Capability
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp entropy-label advertise-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-capability</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**export-prefix-policy** *reference*

<b>Description</b>	Apply an export prefix policy to filter advertised label bindings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp export-prefix-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-prefix-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fec-resolution**

<b>Description</b>	Container with options for controlling IP prefix FEC resolution
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp fec-resolution</a>
<b>Tree</b>	<a href="#">fec-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## longest-prefix *boolean*

<b>Description</b>	When this is set to true IPv4/IPv6 prefix FECs can be resolved by less-specific IPv4/IPv6 routes in the route table, as long as the prefix bits of the route match the prefix bits of the FEC; the IP route with the longest prefix match is the route that is used to resolve the FEC.  When this is set to false, IPv4/IPv6 prefix FECs can only be resolved by routes that are an exact match of the FEC in terms of prefix length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp fec-resolution longest-prefix</a> <i>boolean</i>
<b>Tree</b>	<a href="#">longest-prefix</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## graceful-restart

<b>Description</b>	Attributes for graceful restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## helper-enable *boolean*

<b>Description</b>	Enable or disable graceful restart as a helper
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp graceful-restart helper-enable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">helper-enable</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-reconnect-time** *number*

<b>Description</b>	Specifies the maximum time interval, in seconds, that this router is willing to wait for the remote LDP peer to reconnect after an LDP communication failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp graceful-restart max-reconnect-time</a> <i>number</i>
<b>Tree</b>	<a href="#">max-reconnect-time</a>
<b>Range</b>	10 to 1800
<b>Default</b>	120
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-recovery-time** *number*

<b>Description</b>	Specifies the maximum time interval, in seconds, that this router is willing to preserve its MPLS forwarding state after receiving the Initialization message from the restarted LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp graceful-restart max-recovery-time</a> <i>number</i>
<b>Tree</b>	<a href="#">max-recovery-time</a>
<b>Range</b>	30 to 3600
<b>Default</b>	120
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**import-prefix-policy** *reference*

<b>Description</b>	Apply an import prefix policy to filter received label bindings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp import-prefix-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-prefix-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

**Description** Container for configuration and state related to the IPv4 address family

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv4](#)

**Tree** [ipv4](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bindings

**Description** LDP address and label binding information

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv4](#) [bindings](#)

**Tree** [bindings](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertised-address

**Description** Enter the advertised-address context

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv4](#) [bindings](#) [advertised-address](#)

**Tree** [advertised-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peer [lsr-id](#) *reference* [label-space-id](#) *reference*

**Description** List of LDP peers towards which IPv4 address bindings have been sent

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv4](#) [bindings](#) [advertised-address](#) [peer](#) [lsr-id](#) *reference* [label-space-id](#) *reference*

**Tree** [peer](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsr-id reference

**Description** The LSR ID of the peer, as a portion of the peer LDP ID

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [ipv4](#) [bindings](#) [advertised-address](#) [peer](#) [lsr-id reference](#) [label-space-id reference](#)

**Reference** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id \(ipv4-address-unicast | ipv6-address-unicast-without-local\)](#) [label-space-id number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id reference

**Description** The Label Space ID of the peer, as a portion of the peer LDP ID

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [ipv4](#) [bindings](#) [advertised-address](#) [peer](#) [lsr-id reference](#) [label-space-id reference](#)

**Reference** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id \(ipv4-address-unicast | ipv6-address-unicast-without-local\)](#) [label-space-id number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-address string

**Description** The list of IPv4 address bindings sent to the peer

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [ipv4](#) [bindings](#) [advertised-address](#) [peer](#) [lsr-id reference](#) [label-space-id reference](#) [ip-address string](#)

**Tree** [ip-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertised-prefix-fec

**Description** Enter the advertised-prefix-fec context

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec</a>
<b>Tree</b>	<a href="#">advertised-prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-fec** [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference*

<b>Description</b>	List of IPv4 FEC-label bindings advertised to LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fec** *string*

<b>Description</b>	The prefix FEC value in the FEC-label binding, advertised in a Label Mapping message sent to a peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lsr-id** *reference*

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-space-id** *reference*

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress-lsr-fec** *boolean*

<b>Description</b>	When set true, the router is the egress LSR for the FEC (the FEC is locally originated)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">egress-lsr-fec boolean</a>
<b>Tree</b>	<a href="#">egress-lsr-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** (*number | keyword*)

<b>Description</b>	Advertised label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">label (number   keyword)</a>
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**label-status** *keyword*

<b>Description</b>	Label status
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">label-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>released</li> <li>withdrawn</li> <li>wdraw-pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-type** *keyword*

<b>Description</b>	The label type of the advertised label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings advertised-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">label-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>pop An advertised label that is programmed with a POP operation</li> <li>swap An advertised label that is programmed with a SWAP operation</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-address**

<b>Description</b>	Enter the received-address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-address</a>
<b>Tree</b>	<a href="#">received-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer** *lsr-id reference label-space-id reference*

<b>Description</b>	List of LDP peers from which IPv4 address bindings have been received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-address peer lsr-id reference label-space-id reference</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id reference**

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-address peer lsr-id reference label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local) label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-space-id reference**

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-address peer lsr-id reference label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address-unicast   ipv6-address-unicast-without-local) label-space-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-address** *string*

<b>Description</b>	The list of IPv4 address bindings received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-address peer lsr-id reference label-space-id reference ip-address string</a>
<b>Tree</b>	<a href="#">ip-address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-prefix-fec

<b>Description</b>	Enter the received-prefix-fec context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec</a>
<b>Tree</b>	<a href="#">received-prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-fec [fec string](#) [lsr-id reference](#) [label-space-id reference](#)

<b>Description</b>	List of IPv4 FEC-label bindings received from LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec</a> <a href="#">prefix-fec fec string</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Tree</b>	<a href="#">prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### fec *string*

<b>Description</b>	The prefix FEC value in the FEC-label binding, learned in a Label Mapping message received from a peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec</a> <a href="#">prefix-fec fec string</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsr-id *reference*

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec</a> <a href="#">prefix-fec fec string</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>

<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label-space-id** *reference*

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **entropy-label-transmit** *boolean*

<b>Description</b>	Entropy label (EL/ELI) is pushed when transmitting to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">entropy-label-transmit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-transmit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ingress-lsr-fec** *boolean*

<b>Description</b>	When set true, the router is an ingress LSR for the FEC
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">ingress-lsr-fec</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress-lsr-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** (*number* | *keyword*)

<b>Description</b>	Received label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop** [index number](#)

<b>Description</b>	List of ECMP next-hops towards the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference next-hop index number</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	Label ID index entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference next-hop index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface string**

<b>Description</b>	The outgoing interface towards the LDP peer
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec string lsr-id reference label-space-id reference next-hop index number interface string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop (ipv4-address | ipv6-address)**

<b>Description</b>	The IP next-hop towards the LDP peer
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec string lsr-id reference label-space-id reference next-hop index number next-hop (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-type keyword**

<b>Description</b>	Type of next-hop
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec string lsr-id reference label-space-id reference next-hop index number next-hop-type keyword</a>
<b>Tree</b>	<a href="#">next-hop-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• primary</li> <li>• alternate</li> <li>• rfa</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**outer-label** (*number* | *keyword*)

<b>Description</b>	Outer label value for RLFA
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">next-hop index number</a> <b>outer-label</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">outer-label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**not-used-reason** *keyword*

<b>Description</b>	The reason why the label mapping is not being used in the dataplane
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <b>not-used-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">not-used-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>rejected-on-rx</b> The received FEC was rejected either because non-host FEC or rejected by import policy</li> <li>• <b>exceeds-multipath-limit</b> The LDP multipath ECMP limit has been reached</li> <li>• <b>exceeds-fec-limit</b> The FEC limit has been reached</li> <li>• <b>fec-unresolved</b> The IP prefix FEC is unused because there is no resolving route matching the IP prefix</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-in-forwarding** *boolean*

<b>Description</b>	Reads true if the label is used in forwarding and has been programmed for a push operation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">used-in-forwarding</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-in-forwarding</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-fec128** [virtual-circuit-type](#) *keyword* [virtual-circuit-identifier](#) *number* [peer-lsr-id](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Service FEC128 binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">service-fec128</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-circuit-type** *keyword*

<b>Description</b>	The virtual circuit (VC) type of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Options</b>	<ul style="list-style-type: none"> <li>• ethernet</li> <li>• vlan</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-circuit-identifier** *number*

<b>Description</b>	The virtual circuit identifier of the pseudowire
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer-lsr-id** (*ipv4-address | ipv6-address*)

<b>Description</b>	Peer IP address, LSR-id
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **advertised**

<b>Description</b>	Configuration and state related to advertised service FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised</a>
<b>Tree</b>	<a href="#">advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **control-word** *boolean*

<b>Description</b>	Whether control word capability is advertised
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised</a> <a href="#">control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-aware-transport-label-receive-capability** *boolean*

<b>Description</b>	Whether the capability to receive the flow-aware transport label is advertised to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised flow-aware-transport-label-receive-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-receive-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-aware-transport-label-transmit-capability** *boolean*

<b>Description</b>	Whether the capability to transmit the flow-aware transport label is advertised to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised flow-aware-transport-label-transmit-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-transmit-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**l2-mtu** *number*

<b>Description</b>	Layer-2 MTU advertised to the remote peer in bytes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised l2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">l2-mtu</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** (*number* | *keyword*)

<b>Description</b>	The received label from the remote peer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-status** *keyword*

<b>Description</b>	The status of the advertised label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised label-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-use-pop</li> <li>• released</li> <li>• withdrawn</li> <li>• withdraw-pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pw-status** *boolean*

<b>Description</b>	Whether or not the router advertising the associated label supports pseudowire status signaling
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised pw-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pw-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-status** *keyword*

<b>Description</b>	Indicates the signaling status
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised signaling-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">signaling-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pseudowire-forwarding</li> <li>• pseudowire-not-forwarding</li> <li>• local-attachment-circuit-ingress-fault</li> <li>• local-attachment-circuit-egress-fault</li> <li>• provider-service-network-ingress-fault</li> <li>• provider-service-network-egress-fault</li> <li>• pseudowire-forwarding-standby</li> <li>• pseudowire-request-switchover</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**withdraw-reason** *keyword*

<b>Description</b>	Indicates the reason of withdrawl of the ingress label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised withdraw-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">withdraw-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• local-fault</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**binding-oper-down-reason** *keyword*

<b>Description</b>	The reason why the binding is operationally down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">binding-oper-down-reason</a> <i>keyword</i>

<b>Tree</b>	<a href="#">binding-oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">vc-type-mismatch</a></li> <li>• <a href="#">control-word-mismatch</a></li> <li>• <a href="#">transport-tunnel-oper-down</a></li> <li>• <a href="#">ldp-resource-exhausted</a></li> <li>• <a href="#">no-egress-label</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **binding-oper-state** *keyword*

<b>Description</b>	Operational state of the binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">binding-oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">binding-oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">up</a></li> <li>• <a href="#">down</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received**

<b>Description</b>	Configuration and state related to received service FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **control-word** *boolean*

<b>Description</b>	Whether control word capability is received
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv4</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flow-aware-transport-label-receive-capability** *boolean*

<b>Description</b>	Whether the capability to receive the flow-aware transport label is received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv4</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">flow-aware-transport-label-receive-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-receive-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flow-aware-transport-label-transmit-capability** *boolean*

<b>Description</b>	Whether the capability to transmit the flow-aware transport label is received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv4</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">flow-aware-transport-label-transmit-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-transmit-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **l2-mtu** *number*

<b>Description</b>	Layer-2 MTU received from the remote peer in bytes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv4</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">l2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">l2-mtu</a>
<b>Units</b>	bytes

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label** (*number* | *keyword*)

<b>Description</b>	The received label from the remote peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label-status** *keyword*

<b>Description</b>	The status of the received label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received label-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-use-push</li> <li>• released</li> <li>• withdrawn</li> <li>• withdraw-pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pw-status** *boolean*

<b>Description</b>	Whether or not the router advertising the associated label supports pseudowire status signaling
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received pw-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pw-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **signaling-status** *keyword*

<b>Description</b>	Indicates the signaling status
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received signaling-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">signaling-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pseudowire-forwarding</li> <li>• pseudowire-not-forwarding</li> <li>• local-attachment-circuit-ingress-fault</li> <li>• local-attachment-circuit-egress-fault</li> <li>• provider-service-network-ingress-fault</li> <li>• provider-service-network-egress-fault</li> <li>• pseudowire-forwarding-standby</li> <li>• pseudowire-request-switchover</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-oper-state-change** *string*

<b>Description</b>	The last time that the IPv4 oper-state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**lsr-id string**

<b>Description</b>	Returns the value that is being used as the LDP LSR ID
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 lsr-id string</a>
<b>Tree</b>	<a href="#">lsr-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason keyword**

<b>Description</b>	The reason for the LDP for IPv4 being operationally down
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ldp-admin-disabled</li> <li>• mpls-admin-disabled</li> <li>• no-system-ipv4-address System IPv4 address is used as the LSR ID. If this dependency is missing LDP is down</li> <li>• net-instance-mgr-down</li> <li>• label-block-unavailable</li> <li>• no-resource Memory allocation failure</li> <li>• unknown Other failure reason</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	The operational state of LDP for IPv4
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv4 oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> </ul>

- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-up-to-down-transitions** *number***Description**

The number of times the oper state for IPv4 has transitioned from up to down

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv4 oper-up-to-down-transitions number</a>
<b>Tree</b>	<a href="#">oper-up-to-down-transitions</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Container for configuration and state related to the IPv6 address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bindings

<b>Description</b>	LDP address and label binding information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings</a>
<b>Tree</b>	<a href="#">bindings</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertised-address

<b>Description</b>	Enter the advertised-address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-address</a>
<b>Tree</b>	<a href="#">advertised-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peer [lsr-id reference](#) [label-space-id reference](#)

<b>Description</b>	List of LDP peers towards which IPv6 address bindings have been sent
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-address peer lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsr-id *reference*

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-address peer lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id *reference*

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-address peer lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-address *string*

<b>Description</b>	The list of IPv6 address bindings sent to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-address peer lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">ip-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised-prefix-fec**

<b>Description</b>	Enter the advertised-prefix-fec context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-prefix-fec</a>
<b>Tree</b>	<a href="#">advertised-prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-fec** [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference*

<b>Description</b>	List of IPv6 FEC-label bindings advertised to LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fec** *string*

<b>Description</b>	The prefix FEC value in the FEC-label binding, advertised in a Label Mapping message sent to a peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id** *reference*

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id *reference*

**Description** The Label Space ID of the peer, as a portion of the peer LDP ID

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec fec](#) *string* [lsr-id reference](#) [label-space-id reference](#)

**Reference** [network-instance name](#) *string* [protocols ldp peers peer lsr-id \(ipv4-address-unicast | ipv6-address-unicast-without-local\)](#) [label-space-id number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### egress-lsr-fec *boolean*

**Description** When set true, the router is the egress LSR for the FEC (the FEC is locally originated)

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec fec](#) *string* [lsr-id reference](#) [label-space-id reference](#) [egress-lsr-fec boolean](#)

**Tree** [egress-lsr-fec](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label (*number* | *keyword*)

**Description** Advertised label value

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec fec](#) *string* [lsr-id reference](#) [label-space-id reference](#) [label \(number | keyword\)](#)

**Tree** [label](#)

**Range** 16 to 1048575

**Options**

- IPV4\_EXPLICIT\_NULL
- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-status *keyword*

**Description** Label status

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference* [label-status](#) *keyword*

**Tree** [label-status](#)

**Options**

- released
- withdrawn
- wdraw-pending

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-type *keyword*

**Description** The label type of the advertised label

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings advertised-prefix-fec prefix-fec fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference* [label-type](#) *keyword*

**Tree** [label-type](#)

**Options**

- pop  
An advertised label that is programmed with a POP operation
- swap  
An advertised label that is programmed with a SWAP operation

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-address

**Description** Enter the received-address context

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings received-address](#)

**Tree** [received-address](#)

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peer [lsr-id reference](#) [label-space-id reference](#)

<b>Description</b>	List of LDP peers from which IPv6 address bindings have been received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-address</a> <a href="#">peer</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [lsr-id reference](#)

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-address</a> <a href="#">peer</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [label-space-id reference](#)

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-address</a> <a href="#">peer</a> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [ip-address string](#)

<b>Description</b>	The list of IPv6 address bindings received from the peer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-address peer lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i> <a href="#">ip-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received-prefix-fec

<b>Description</b>	Enter the received-prefix-fec context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec</a>
<b>Tree</b>	<a href="#">received-prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix-fec [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference*

<b>Description</b>	List of IPv6 FEC-label bindings received from LDP peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec</a> <a href="#">prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec *string*

<b>Description</b>	The prefix FEC value in the FEC-label binding, learned in a Label Mapping message received from a peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec</a> <a href="#">prefix-fec fec</a> <i>string</i> <a href="#">lsr-id</a> <i>reference</i> <a href="#">label-space-id</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id reference**

<b>Description</b>	The LSR ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-prefix-fec</a> <a href="#">prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-space-id reference**

<b>Description</b>	The Label Space ID of the peer, as a portion of the peer LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-prefix-fec</a> <a href="#">prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entropy-label-transmit boolean**

<b>Description</b>	Entropy label (EL/ELI) is pushed when transmitting to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-prefix-fec</a> <a href="#">prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">entropy-label-transmit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-transmit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress-lsr-fec boolean**

<b>Description</b>	When set true, the router is an ingress LSR for the FEC
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">received-prefix-fec</a> <a href="#">prefix-fec</a> <a href="#">fec</a> <i>string</i> <a href="#">lsr-id reference</a> <a href="#">label-space-id reference</a> <a href="#">ingress-lsr-fec</a> <i>boolean</i>

<b>Tree</b>	<a href="#">ingress-lsr-fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label** (*number* | *keyword*)

<b>Description</b>	Received label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop** [index](#) *number*

<b>Description</b>	List of ECMP next-hops towards the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference next-hop index</a> <i>number</i>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *number*

<b>Description</b>	Label ID index entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference next-hop index</a> <i>number</i>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface *string*

**Description** The outgoing interface towards the LDP peer

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv6](#) [bindings](#) [received-prefix-fec](#) [prefix-fec](#) [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference* [next-hop](#) [index](#) [number](#) [interface](#) *string*

**Tree** [interface](#)

**String Length** 5 to 25

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop (*ipv4-address* | *ipv6-address*)

**Description** The IP next-hop towards the LDP peer

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv6](#) [bindings](#) [received-prefix-fec](#) [prefix-fec](#) [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference* [next-hop](#) [index](#) [number](#) [next-hop](#) (*ipv4-address* | *ipv6-address*)

**Tree** [next-hop](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop-type *keyword*

**Description** Type of next-hop

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [ipv6](#) [bindings](#) [received-prefix-fec](#) [prefix-fec](#) [fec](#) *string* [lsr-id](#) *reference* [label-space-id](#) *reference* [next-hop](#) [index](#) [number](#) [next-hop-type](#) *keyword*

**Tree** [next-hop-type](#)

**Options**

- primary
- alternate
- rfa

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### outer-label (*number* | *keyword*)

**Description** Outer label value for RLFA

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec](#) *string* [lsr-id reference label-space-id reference next-hop index number outer-label](#) (*number* | *keyword*)

**Tree** [outer-label](#)

**Range** 16 to 1048575

**Options**

- IPV4\_EXPLICIT\_NULL
- IPV6\_EXPLICIT\_NULL
- IMPLICIT\_NULL

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### not-used-reason *keyword*

**Description** The reason why the label mapping is not being used in the dataplane

**Context** [network-instance name](#) *string* [protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec](#) *string* [lsr-id reference label-space-id reference not-used-reason keyword](#)

**Tree** [not-used-reason](#)

**Options**

- rejected-on-rx  
The received FEC was rejected either because non-host FEC or rejected by import policy
- exceeds-multipath-limit  
The LDP multipath ECMP limit has been reached
- exceeds-fec-limit  
The FEC limit has been reached
- fec-unresolved  
The IP prefix FEC is unused because there is no resolving route matching the IP prefix

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-in-forwarding** *boolean*

<b>Description</b>	Reads true if the label is used in forwarding and has been programmed for a push operation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings received-prefix-fec prefix-fec fec</a> <i>string</i> <a href="#">lsr-id reference label-space-id reference used-in-forwarding</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-in-forwarding</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-fec128** [virtual-circuit-type](#) *keyword* [virtual-circuit-identifier](#) *number* [peer-lsr-id](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Service FEC128 binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">service-fec128</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-circuit-type** *keyword*

<b>Description</b>	The virtual circuit (VC) type of the pseudowire
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Options</b>	<ul style="list-style-type: none"> <li>• ethernet</li> <li>• vlan</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-circuit-identifier** *number*

<b>Description</b>	The virtual circuit identifier of the pseudowire
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-lsr-id** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Peer IP address, LSR-id
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised**

<b>Description</b>	Configuration and state related to advertised service FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">advertised</a>
<b>Tree</b>	<a href="#">advertised</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-word** *boolean*

<b>Description</b>	Whether control word capability is advertised
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">advertised</a> <a href="#">control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-aware-transport-label-receive-capability** *boolean*

<b>Description</b>	Whether the capability to receive the flow-aware transport label is advertised to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised flow-aware-transport-label-receive-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-receive-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**flow-aware-transport-label-transmit-capability** *boolean*

<b>Description</b>	Whether the capability to transmit the flow-aware transport label is advertised to the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised flow-aware-transport-label-transmit-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-transmit-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**l2-mtu** *number*

<b>Description</b>	Layer-2 MTU advertised to the remote peer in bytes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised l2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">l2-mtu</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** (*number* | *keyword*)

<b>Description</b>	The received label from the remote peer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-status** *keyword*

<b>Description</b>	The status of the advertised label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised label-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-use-pop</li> <li>• released</li> <li>• withdrawn</li> <li>• withdraw-pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pw-status** *boolean*

<b>Description</b>	Whether or not the router advertising the associated label supports pseudowire status signaling
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised pw-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pw-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-status** *keyword*

<b>Description</b>	Indicates the signaling status
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised signaling-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">signaling-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pseudowire-forwarding</li> <li>• pseudowire-not-forwarding</li> <li>• local-attachment-circuit-ingress-fault</li> <li>• local-attachment-circuit-egress-fault</li> <li>• provider-service-network-ingress-fault</li> <li>• provider-service-network-egress-fault</li> <li>• pseudowire-forwarding-standby</li> <li>• pseudowire-request-switchover</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**withdraw-reason** *keyword*

<b>Description</b>	Indicates the reason of withdrawl of the ingress label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">advertised withdraw-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">withdraw-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• local-fault</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**binding-oper-down-reason** *keyword*

<b>Description</b>	The reason why the binding is operationally down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">binding-oper-down-reason</a> <i>keyword</i>

<b>Tree</b>	<a href="#">binding-oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">vc-type-mismatch</a></li> <li>• <a href="#">control-word-mismatch</a></li> <li>• <a href="#">transport-tunnel-oper-down</a></li> <li>• <a href="#">ldp-resource-exhausted</a></li> <li>• <a href="#">no-egress-label</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **binding-oper-state** *keyword*

<b>Description</b>	Operational state of the binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">binding-oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">binding-oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">up</a></li> <li>• <a href="#">down</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received**

<b>Description</b>	Configuration and state related to received service FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **control-word** *boolean*

<b>Description</b>	Whether control word capability is received
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">control-word</a> <i>boolean</i>
<b>Tree</b>	<a href="#">control-word</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flow-aware-transport-label-receive-capability** *boolean*

<b>Description</b>	Whether the capability to receive the flow-aware transport label is received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">flow-aware-transport-label-receive-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-receive-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flow-aware-transport-label-transmit-capability** *boolean*

<b>Description</b>	Whether the capability to transmit the flow-aware transport label is received from the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">flow-aware-transport-label-transmit-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">flow-aware-transport-label-transmit-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **l2-mtu** *number*

<b>Description</b>	Layer-2 MTU received from the remote peer in bytes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">ipv6</a> <a href="#">bindings</a> <a href="#">service-fec128</a> <a href="#">virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">received</a> <a href="#">l2-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">l2-mtu</a>
<b>Units</b>	bytes

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label** (*number* | *keyword*)

<b>Description</b>	The received label from the remote peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received label</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label-status** *keyword*

<b>Description</b>	The status of the received label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received label-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">label-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-use-push</li> <li>• released</li> <li>• withdrawn</li> <li>• withdraw-pending</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pw-status** *boolean*

<b>Description</b>	Whether or not the router advertising the associated label supports pseudowire status signaling
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received pw-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pw-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **signaling-status** *keyword*

<b>Description</b>	Indicates the signaling status
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 bindings service-fec128 virtual-circuit-type</a> <i>keyword</i> <a href="#">virtual-circuit-identifier</a> <i>number</i> <a href="#">peer-lsr-id (ipv4-address   ipv6-address)</a> <a href="#">received signaling-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">signaling-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pseudowire-forwarding</li> <li>• pseudowire-not-forwarding</li> <li>• local-attachment-circuit-ingress-fault</li> <li>• local-attachment-circuit-egress-fault</li> <li>• provider-service-network-ingress-fault</li> <li>• provider-service-network-egress-fault</li> <li>• pseudowire-forwarding-standby</li> <li>• pseudowire-request-switchover</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-oper-state-change** *string*

<b>Description</b>	The last time that the IPv6 oper-state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id string**

<b>Description</b>	Returns the value that is being used as the LDP LSR ID
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv6 lsr-id string</a>
<b>Tree</b>	<a href="#">lsr-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason keyword**

<b>Description</b>	The reason for the LDP for IPv6 being operationally down
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv6 oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ldp-admin-disabled</li> <li>• mpls-admin-disabled</li> <li>• no-system-ipv6-address System IPv6 address is used as the LSR ID. If this dependency is missing LDP is down</li> <li>• net-instance-mgr-down</li> <li>• label-block-unavailable</li> <li>• no-resource Memory allocation failure</li> <li>• unknown Other failure reason</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	The operational state of LDP for IPv6
<b>Context</b>	<a href="#">network-instance name string protocols ldp ipv6 oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> </ul>

- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-up-to-down-transitions** *number***Description**

The number of times the oper state for IPv6 has transitioned from up to down



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp ipv6 oper-up-to-down-transitions number</a>
<b>Tree</b>	<a href="#">oper-up-to-down-transitions</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## loopfree-alternate

<b>Description</b>	Enter the loopfree-alternate context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp loopfree-alternate</a>
<b>Tree</b>	<a href="#">loopfree-alternate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable Loop Free Alternates
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp loopfree-alternate admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multipath

<b>Description</b>	Container with options to configure load-balancing over equal-cost paths
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp multipath</a>
<b>Tree</b>	<a href="#">multipath</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-paths** *number*

<b>Description</b>	Specifies the maximum number of next-hops used for load-balancing toward towards a given FEC
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp multipath max-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">max-paths</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peers**

<b>Description</b>	Configuration and state related to peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers</a>
<b>Tree</b>	<a href="#">peers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer** [lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number*

<b>Description</b>	List of peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	The LSR ID of the peer, to identify the globally unique LSR. This leaf is used together with the leaf 'label-space-id' to form the LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-space-id *number*

<b>Description</b>	The Label Space ID of the peer, to identify a specific label space within the LSR. This is the last two octets of the LDP ID. This leaf is used together with the leaf 'lsr-id' to form the LDP ID
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adjacency-type *keyword*

<b>Description</b>	The value indicates the adjacency type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">adjacency-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">adjacency-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>link</li> <li>targeted</li> <li>both</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adv-local-lsr-id *boolean*

<b>Description</b>	When set to true, the FEC for the local LSR ID is advertised. When set to false, the FEC for the local LSR ID is not advertised
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">adv-local-lsr-id</a> <i>boolean</i>
<b>Tree</b>	<a href="#">adv-local-lsr-id</a>
<b>Default</b>	false

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## end-of-lib

<b>Description</b>	Container with state information pertaining to sent and received End of LIB markers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib</a>
<b>Tree</b>	<a href="#">end-of-lib</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-prefix-fecs

<b>Description</b>	Enter the ipv4-prefix-fecs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib</a> <a href="#">ipv4-prefix-fecs</a>
<b>Tree</b>	<a href="#">ipv4-prefix-fecs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received *boolean*

<b>Description</b>	When this is true, an End-of-LIB marker was received from the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib</a> <a href="#">ipv4-prefix-fecs</a> <a href="#">received</a> <i>boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sent** *boolean*

<b>Description</b>	When this is true, an End-of-LIB marker was sent to the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib ipv4-prefix-fecs sent</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-prefix-fecs**

<b>Description</b>	Enter the ipv6-prefix-fecs context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib ipv6-prefix-fecs</a>
<b>Tree</b>	<a href="#">ipv6-prefix-fecs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received** *boolean*

<b>Description</b>	When this is true, an End-of-LIB marker was received from the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib ipv6-prefix-fecs received</a> <i>boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sent** *boolean*

<b>Description</b>	When this is true, an End-of-LIB marker was sent to the LDP peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">end-of-lib ipv6-prefix-fecs sent</a> <i>boolean</i>

<b>Tree</b>	<a href="#">sent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **export-prefix-policy** *reference*

<b>Description</b>	Apply an export prefix policy to filter advertised label bindings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">export-prefix-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-prefix-policy</a>
<b>Reference</b>	<a href="#">routing-policy</a> <i>policy name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fec-limit** *number*

<b>Description</b>	The maximum number of FECs of all types combined that will be accepted from the peer  The value 0 implies no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">fec-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">fec-limit</a>
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fec-limit-exceeded** *boolean*

<b>Description</b>	Reads true when the peer has sent more FECs than the configured limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">fec-limit-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fec-limit-exceeded</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## graceful-restart

**Description** Graceful restart operational state

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [graceful-restart](#)

**Tree** [graceful-restart](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peer-reconnect-time *number*

**Description** The requested reconnect time

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [graceful-restart](#) [peer-reconnect-time](#) [number](#)

**Tree** [peer-reconnect-time](#)

**Range** 10 to 1800

**Units** seconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peer-recovery-time *number*

**Description** The requested recovery time

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [graceful-restart](#) [peer-recovery-time](#) [number](#)

**Tree** [peer-recovery-time](#)

**Range** 30 to 3600

**Default** 120

**Units** seconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peer-restarting *boolean*

**Description** If true, the peer is currently in the process of restarting

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [graceful-restart peer-restarting](#) *boolean*

**Tree** [peer-restarting](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### import-prefix-policy *reference*

**Description** Apply an import prefix policy to filter received label bindings

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [import-prefix-policy](#) *reference*

**Tree** [import-prefix-policy](#)

**Reference** [routing-policy policy name](#) *string*

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-advertisement-mode

**Description** Label advertisement mode state

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [label-advertisement-mode](#)

**Tree** [label-advertisement-mode](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**negotiated** *keyword*

<b>Description</b>	Negotiated Label Advertisement Mode
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">label-advertisement-mode negotiated</a> <i>keyword</i>
<b>Tree</b>	<a href="#">negotiated</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">downstream-unsolicited</a> Downstream Unsolicited</li> <li>• <a href="#">downstream-on-demand</a> Downstream on Demand</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-oper-state-change** *string*

<b>Description</b>	Last time the peer state changed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**overload**

<b>Description</b>	Overload state of the session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">overload</a>
<b>Tree</b>	<a href="#">overload</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-router-is-overloaded** *boolean*

<b>Description</b>	This router transmitted an overload TLV requesting that the peer stop advertising new FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">overload local-router-is-overloaded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">local-router-is-overloaded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-is-overloaded** *boolean*

<b>Description</b>	The peer has sent an overload TLV to this router requesting that we stop advertising new FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">overload peer-is-overloaded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">peer-is-overloaded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-capabilities**

<b>Description</b>	Capabilities signalled by the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a>
<b>Tree</b>	<a href="#">received-capabilities</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dual-stack-capability** *boolean*

<b>Description</b>	Dual stack capability. TLV 0x0701
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">dual-stack-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">dual-stack-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dynamic-capability** *boolean*

<b>Description</b>	Dynamic capability advertisement capability. Indicates support for Capability messages. TLV 0x0506
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">dynamic-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">dynamic-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **entropy-label-capability** *boolean*

<b>Description</b>	Entropy label capability. TLV 0x0206
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">entropy-label-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **graceful-restart-capability** *boolean*

<b>Description</b>	Fault tolerance protection TLV 0x0503
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">graceful-restart-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">graceful-restart-capability</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **make-before-break-capability** *boolean*

**Description** Make before break capability. TLV 0x050A

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [received-capabilities](#) [make-before-break-capability](#) *boolean*

**Tree** [make-before-break-capability](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multipoint-to-multipoint-capability** *boolean*

**Description** Multipoint to multipoint FEC capability. TLV 0x0509

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [received-capabilities](#) [multipoint-to-multipoint-capability](#) *boolean*

**Tree** [multipoint-to-multipoint-capability](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **nokia-vendor-overload-capability** *boolean*

**Description** Overload capability

**Context** [network-instance name](#) *string* [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [label-space-id](#) *number* [received-capabilities](#) [nokia-vendor-overload-capability](#) *boolean*

**Tree** [nokia-vendor-overload-capability](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **point-to-multipoint-capability** *boolean*

**Description** Point to multipoint FEC capability. TLV 0x0508

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">Ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">point-to-multipoint-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">point-to-multipoint-capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### state-advertisement-control

<b>Description</b>	State advertisement control capability. TLV 0x050D
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">Ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">state-advertisement-control</a>
<b>Tree</b>	<a href="#">state-advertisement-control</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-prefix-disable *boolean*

<b>Description</b>	Indicates desire to not receive IPv4 prefix FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">Ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">state-advertisement-control</a> <a href="#">ipv4-prefix-disable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4-prefix-disable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-prefix-disable *boolean*

<b>Description</b>	Indicates desire to not receive IPv6 prefix FECs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">Ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">received-capabilities</a> <a href="#">state-advertisement-control</a> <a href="#">ipv6-prefix-disable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-prefix-disable</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **p2p-pseudowire-fec-128-disable** *boolean*

**Description** Indicates desire to not receive P2P PW FEC 128 FECs

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast | ipv6-address-unicast-without-local*) [label-space-id number](#) [received-capabilities state-advertisement-control p2p-pseudowire-fec-128-disable](#) *boolean*

**Tree** [p2p-pseudowire-fec-128-disable](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **p2p-pseudowire-fec-129-disable** *boolean*

**Description** Indicates desire to not receive P2P PW FEC 129 FECs

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast | ipv6-address-unicast-without-local*) [label-space-id number](#) [received-capabilities state-advertisement-control p2p-pseudowire-fec-129-disable](#) *boolean*

**Tree** [p2p-pseudowire-fec-129-disable](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unrecognized-notification-capability** *boolean*

**Description** Unrecognized notification capability. TLV 0x0603

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address-unicast | ipv6-address-unicast-without-local*) [label-space-id number](#) [received-capabilities unrecognized-notification-capability](#) *boolean*

**Tree** [unrecognized-notification-capability](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-holdtime**

<b>Description</b>	Session holdtime state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">session-holdtime</a>
<b>Tree</b>	<a href="#">session-holdtime</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**negotiated** *number*

<b>Description</b>	Negotiated holdtime
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">session-holdtime negotiated</a> <i>number</i>
<b>Tree</b>	<a href="#">negotiated</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-proposed** *number*

<b>Description</b>	Peer holdtime
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">session-holdtime peer-proposed</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-proposed</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remaining** *number*

<b>Description</b>	Remaining holdtime
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">session-holdtime</a> <i>remaining</i> <i>number</i>
<b>Tree</b>	<a href="#">remaining</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-state** *keyword*

<b>Description</b>	Representing the operational status of the LDP session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">session-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">session-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• non-existent NON EXISTENT state. Transport disconnected</li> <li>• initialized INITIALIZED state</li> <li>• openrec OPENREC state</li> <li>• opensent OPENSENT state</li> <li>• operational OPERATIONAL state</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Statistics objects
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address-statistics

**Description** Enter the address-statistics context

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [statistics](#) [address-statistics](#)

**Tree** [address-statistics](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

**Description** Enter the ipv4 context

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [statistics](#) [address-statistics](#) [ipv4](#)

**Tree** [ipv4](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertised-addresses *number*

**Description** The number of IPv4 addresses advertised to a peer

**Context** [network-instance name](#) [string](#) [protocols](#) [ldp](#) [peers](#) [peer](#) [lsr-id](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [label-space-id](#) [number](#) [statistics](#) [address-statistics](#) [ipv4](#) [advertised-addresses](#) [number](#)

**Tree** [advertised-addresses](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-addresses number**

<b>Description</b>	The number of IPv4 addresses received from a peer
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">address-statistics</a> <a href="#">ipv4</a> <a href="#">received-addresses</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">received-addresses</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6**

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">address-statistics</a> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised-addresses number**

<b>Description</b>	The number of IPv6 addresses advertised to a peer
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">address-statistics</a> <a href="#">ipv6</a> <a href="#">advertised-addresses</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">advertised-addresses</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-addresses number**

<b>Description</b>	The number of IPv6 addresses received from a peer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics address-statistics ipv6 received-addresses</a> <i>number</i>
<b>Tree</b>	<a href="#">received-addresses</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec-statistics

<b>Description</b>	Enter the fec-statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics fec-statistics</a>
<b>Tree</b>	<a href="#">fec-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-prefix

<b>Description</b>	Enter the ipv4-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics fec-statistics ipv4-prefix</a>
<b>Tree</b>	<a href="#">ipv4-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## advertised-fecs *number*

<b>Description</b>	The number of advertised IPv4 prefix FECs to a single peer or all peers. In the overall summary the same FEC prefix advertised to multiple peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics fec-statistics ipv4-prefix advertised-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">advertised-fecs</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-fecs *number*

<b>Description</b>	The number of received IPv4 prefix FECs from a single peer or all peers. In the overall summary the same FEC prefix from different peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv4-prefix</a> <a href="#">received-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">received-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6-prefix

<b>Description</b>	Enter the ipv6-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv6-prefix</a>
<b>Tree</b>	<a href="#">ipv6-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### advertised-fecs *number*

<b>Description</b>	The number of advertised IPv6 prefix FECs to a single peer or all peers. In the overall summary the same FEC prefix advertised to multiple peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv6-prefix</a> <a href="#">advertised-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">advertised-fecs</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-fecs *number*

<b>Description</b>	The number of received IPv6 prefix FECs from a single peer or all peers. In the overall summary the same FEC prefix from different peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv6-prefix</a> <a href="#">received-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">received-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-messages

<b>Description</b>	Inbound statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">received-messages</a>
<b>Tree</b>	<a href="#">received-messages</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address *number*

<b>Description</b>	The number of address messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">address</a> <i>number</i>
<b>Tree</b>	<a href="#">address</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address-withdraw *number*

<b>Description</b>	The number of address-withdraw messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">address-withdraw</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">address-withdraw</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### capability *number*

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">capability</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">capability</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### initialization *number*

<b>Description</b>	The number of initialization messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">initialization</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">initialization</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### keepalive *number*

<b>Description</b>	The number of keepalive messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">keepalive</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">keepalive</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-abort-request *number*

<b>Description</b>	The number of label-abort-request messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">label-abort-request</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">label-abort-request</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-mapping *number*

<b>Description</b>	The number of label-mapping messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">label-mapping</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">label-mapping</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-release *number*

<b>Description</b>	The number of label-release messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">label-release</a> <i>number</i>
<b>Tree</b>	<a href="#">label-release</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-request *number*

<b>Description</b>	The number of label-request messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">label-request</a> <i>number</i>
<b>Tree</b>	<a href="#">label-request</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-withdraw *number*

<b>Description</b>	The number of label-withdraw messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">label-withdraw</a> <i>number</i>
<b>Tree</b>	<a href="#">label-withdraw</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**notification number**

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">notification</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">notification</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-messages number**

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">received-messages</a> <a href="#">total-messages</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">total-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sent-messages**

<b>Description</b>	Outbound statistics
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">sent-messages</a>
<b>Tree</b>	<a href="#">sent-messages</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address number**

<b>Description</b>	The number of address messages sent or received
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">address</a> <i>number</i>
<b>Tree</b>	<a href="#">address</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address-withdraw** *number*

<b>Description</b>	The number of address-withdraw messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">address-withdraw</a> <i>number</i>
<b>Tree</b>	<a href="#">address-withdraw</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **capability** *number*

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">capability</a> <i>number</i>
<b>Tree</b>	<a href="#">capability</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **initialization** *number*

<b>Description</b>	The number of initialization messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">initialization</a> <i>number</i>

<b>Tree</b>	<a href="#">initialization</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### keepalive *number*

<b>Description</b>	The number of keepalive messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">keepalive</a> <i>number</i>
<b>Tree</b>	<a href="#">keepalive</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-abort-request *number*

<b>Description</b>	The number of label-abort-request messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">label-abort-request</a> <i>number</i>
<b>Tree</b>	<a href="#">label-abort-request</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-mapping *number*

<b>Description</b>	The number of label-mapping messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">label-mapping</a> <i>number</i>
<b>Tree</b>	<a href="#">label-mapping</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-release *number*

<b>Description</b>	The number of label-release messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">label-release</a> <i>number</i>
<b>Tree</b>	<a href="#">label-release</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-request *number*

<b>Description</b>	The number of label-request messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">label-request</a> <i>number</i>
<b>Tree</b>	<a href="#">label-request</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-withdraw *number*

<b>Description</b>	The number of label-withdraw messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">sent-messages</a> <a href="#">label-withdraw</a> <i>number</i>
<b>Tree</b>	<a href="#">label-withdraw</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**notification number**

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics sent-messages notification number</a>
<b>Tree</b>	<a href="#">notification</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-messages number**

<b>Description</b>	The number of messages sent or received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">statistics sent-messages total-messages number</a>
<b>Tree</b>	<a href="#">total-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tcp-transport**

<b>Description</b>	Enter the tcp-transport context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">tcp-transport</a>
<b>Tree</b>	<a href="#">tcp-transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Local address
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">tcp-transport</a> <a href="#">local-address</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> )
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-port** *number*

<b>Description</b>	Local port number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">tcp-transport</a> <a href="#">local-port</a> <i>number</i>
<b>Tree</b>	<a href="#">local-port</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Remote address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">tcp-transport</a> <a href="#">remote-address</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> )
<b>Tree</b>	<a href="#">remote-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-port** *number*

<b>Description</b>	Remote port number
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">peers</a> <a href="#">peer</a> <a href="#">lsr-id</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">tcp-transport</a> <a href="#">remote-port</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-port</a>
<b>Range</b>	0 to 65535

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace-options

<b>Description</b>	Configure event/packet tracing for one specific session
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace keyword

<b>Description</b>	Specifies the trace information to be captured
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> ) <a href="#">label-space-id</a> <i>number</i> <a href="#">trace-options</a> <a href="#">trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Trace all events and packets</li> <li>• events-all Trace all events</li> <li>• events-session Trace session related events</li> <li>• events-binding Trace binding related events</li> <li>• messages-all Trace all LDP messages</li> <li>• messages-all-detail Trace all LDP messages with detailed output</li> <li>• messages-initialization Trace LDP Initialization packets</li> <li>• messages-initialization-detail Trace LDP Initialization packets with detailed output</li> </ul>

- `messages-keepalive`  
Trace LDP Keepalive packets
- `messages-label`  
Trace LDP Label Mapping, Label Request, Label Abort Request, Label Withdraw and Label Release packets
- `messages-label-detail`  
Trace LDP Label Mapping, Label Request, Label Abort Request, Label Withdraw and Label Release packets with detailed output
- `messages-hello`  
Trace Hello packets
- `messages-hello-detail`  
Trace LDP Hello packets with detailed output

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-keepalive-holdtime** *number*

**Description** The time interval after which an inactive LDP session terminates and the corresponding TCP session closes. Inactivity is defined as not receiving LDP packets from the peer

**Context** [network-instance name](#) *string* [protocols ldp peers session-keepalive-holdtime](#) *number*

**Tree** [session-keepalive-holdtime](#)

**Range** 45 to 3600

**Default** 180

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-keepalive-interval** *number*

**Description** The interval between successive transmissions of keepalive packets. Keepalive packets are only sent in the absence of other LDP packets transmitted over the LDP session

**Context** [network-instance name](#) *string* [protocols ldp peers session-keepalive-interval](#) *number*

**Tree** [session-keepalive-interval](#)



<b>Range</b>	15 to 1200
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace-options

<b>Description</b>	Configure event/packet tracing for all sessions (configured and dynamic)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace keyword

<b>Description</b>	Specifies the trace information to be captured
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers trace-options trace keyword</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Trace all events and packets</li> <li>• events-all Trace all events</li> <li>• events-session Trace session related events</li> <li>• events-binding Trace binding related events</li> <li>• messages-all Trace all LDP messages</li> <li>• messages-all-detail Trace all LDP messages with detailed output</li> <li>• messages-initialization Trace LDP Initialization packets</li> <li>• messages-initialization-detail</li> </ul>

- Trace LDP Initialization packets with detailed output
- messages-keepalive
  - Trace LDP Keepalive packets
- messages-label
  - Trace LDP Label Mapping, Label Request, Label Abort Request, Label Withdraw and Label Release packets
- messages-label-detail
  - Trace LDP Label Mapping, Label Request, Label Abort Request, Label Withdraw and Label Release packets with detailed output
- messages-hello
  - Trace Hello packets
- messages-hello-detail
  - Trace LDP Hello packets with detailed output

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-fec** *fec-prefix* (*ipv4-prefix* | *ipv6-prefix*)

**Description** Configure static FEC

**Context** [network-instance name](#) *string* [protocols ldp static-fec fec-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Tree** [static-fec](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fec-prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** Static FEC IP prefix

**Context** [network-instance name](#) *string* [protocols ldp static-fec fec-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## swap *boolean*

<b>Description</b>	Swap label. If false, label is popped
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp static-fec fec-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">swap</a> <i>boolean</i>
<b>Tree</b>	<a href="#">swap</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	LDP instance level statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec-statistics

<b>Description</b>	Enter the fec-statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics fec-statistics</a>
<b>Tree</b>	<a href="#">fec-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-prefix

<b>Description</b>	Enter the ipv4-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics fec-statistics ipv4-prefix</a>
<b>Tree</b>	<a href="#">ipv4-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised-fecs number**

<b>Description</b>	The number of advertised IPv4 prefix FECs to a single peer or all peers. In the overall summary the same FEC prefix advertised to multiple peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv4-prefix</a> <a href="#">advertised-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">advertised-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-fecs number**

<b>Description</b>	The number of received IPv4 prefix FECs from a single peer or all peers. In the overall summary the same FEC prefix from different peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv4-prefix</a> <a href="#">received-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">received-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-prefix**

<b>Description</b>	Enter the ipv6-prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">fec-statistics</a> <a href="#">ipv6-prefix</a>
<b>Tree</b>	<a href="#">ipv6-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertised-fecs number**

<b>Description</b>	The number of advertised IPv6 prefix FECs to a single peer or all peers. In the overall summary the same FEC prefix advertised to multiple peers counts as 1
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics fec-statistics ipv6-prefix advertised-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">advertised-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-fecs** *number*

<b>Description</b>	The number of received IPv6 prefix FECs from a single peer or all peers. In the overall summary the same FEC prefix from different peers counts as 1
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics fec-statistics ipv6-prefix received-fecs</a> <i>number</i>
<b>Tree</b>	<a href="#">received-fecs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4**

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-discovery-interfaces** *number*

<b>Description</b>	The total number of IP subinterfaces on which basic LDP discovery is active
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4 total-discovery-interfaces</a> <i>number</i>
<b>Tree</b>	<a href="#">total-discovery-interfaces</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-discovery-targets** *number*

<b>Description</b>	The total number of configured extended discovery targets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4 total-discovery-targets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-discovery-targets</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-interface-hello-adjacencies** *number*

<b>Description</b>	The total number of interface hello adjacencies that are up
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4 total-interface-hello-adjacencies</a> <i>number</i>
<b>Tree</b>	<a href="#">total-interface-hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-peers** *number*

<b>Description</b>	The total number of LDP TCP sessions that are established
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4 total-peers</a> <i>number</i>
<b>Tree</b>	<a href="#">total-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-targeted-hello-adjacencies** *number*

<b>Description</b>	The total number of targeted hello adjacencies that are up
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv4 total-targeted-hello-adjacencies</a> <i>number</i>
<b>Tree</b>	<a href="#">total-targeted-hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## total-discovery-interfaces *number*

<b>Description</b>	The total number of IP subinterfaces on which basic LDP discovery is active
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6 total-discovery-interfaces</a> <i>number</i>
<b>Tree</b>	<a href="#">total-discovery-interfaces</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## total-discovery-targets *number*

<b>Description</b>	The total number of configured extended discovery targets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6 total-discovery-targets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-discovery-targets</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## total-interface-hello-adjacencies *number*

<b>Description</b>	The total number of interface hello adjacencies that are up
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6 total-interface-hello-adjacencies</a> <i>number</i>
<b>Tree</b>	<a href="#">total-interface-hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-peers** *number*

<b>Description</b>	The total number of LDP TCP sessions that are established
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6 total-peers number</a>
<b>Tree</b>	<a href="#">total-peers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-targeted-hello-adjacencies** *number*

<b>Description</b>	The total number of targeted hello adjacencies that are up
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics ipv6 total-targeted-hello-adjacencies number</a>
<b>Tree</b>	<a href="#">total-targeted-hello-adjacencies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**protocol-errors**

<b>Description</b>	Enter the protocol-errors context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors</a>
<b>Tree</b>	<a href="#">protocol-errors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-ldp-identifier** *number*

<b>Description</b>	The number of notification messages sent to advise of a bad LDP identifier
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors bad-ldp-identifier number</a>
<b>Tree</b>	<a href="#">bad-ldp-identifier</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**bad-message-length** *number*

<b>Description</b>	The number of notification messages sent to advise of a bad message length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">protocol-errors</a> <a href="#">bad-message-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-message-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-pdu-length** *number*

<b>Description</b>	The number of notification messages sent to advise of a bad PDU length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">protocol-errors</a> <a href="#">bad-pdu-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-pdu-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-protocol-version** *number*

<b>Description</b>	The number of notification messages sent to advise of a bad protocol version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">protocol-errors</a> <a href="#">bad-protocol-version</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-protocol-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-tlv-length** *number*

<b>Description</b>	The number of notification messages sent to advise of a bad TLV length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ldp</a> <a href="#">statistics</a> <a href="#">protocol-errors</a> <a href="#">bad-tlv-length</a> <i>number</i>

<b>Tree</b>	<a href="#">bad-tlv-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **malformed-tlv-value** *number*

<b>Description</b>	The number of notification messages sent to advise of a malformed TLV value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors malformed-tlv-value</a> <i>number</i>
<b>Tree</b>	<a href="#">malformed-tlv-value</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **missing-message-parameters** *number*

<b>Description</b>	The number of notification messages sent to advise of missing mandatory parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors missing-message-parameters</a> <i>number</i>
<b>Tree</b>	<a href="#">missing-message-parameters</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-rejected-bad-keepalive-time** *number*

<b>Description</b>	The number of notification messages sent to advise that a TCP connection was closed because the requested keepalive time is not acceptable
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors session-rejected-bad-keepalive-time</a> <i>number</i>
<b>Tree</b>	<a href="#">session-rejected-bad-keepalive-time</a>
<b>Default</b>	0

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<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-rejected-no-hello** *number*

<b>Description</b>	The number of notification messages sent to advise that a TCP connection was closed because there was no matching Hello adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors session-rejected-no-hello</a> <i>number</i>
<b>Tree</b>	<a href="#">session-rejected-no-hello</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-rejected-parameters-adv-mode** *number*

<b>Description</b>	The number of notification messages sent to advise that a TCP connection was closed because the requested label advertisement mode is not acceptable
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors session-rejected-parameters-adv-mode</a> <i>number</i>
<b>Tree</b>	<a href="#">session-rejected-parameters-adv-mode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-rejected-parameters-label-range** *number*

<b>Description</b>	The number of notification messages sent to advise that a TCP connection was closed because the requested label range is not acceptable
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors session-rejected-parameters-label-range</a> <i>number</i>
<b>Tree</b>	<a href="#">session-rejected-parameters-label-range</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-rejected-parameters-max-pdu-length** *number*

**Description** The number of notification messages sent to advise that a TCP connection was closed because the requested Maximum PDU Length is not acceptable

**Context** [network-instance name](#) *string* [protocols ldp statistics protocol-errors session-rejected-parameters-max-pdu-length](#) *number*

**Tree** [session-rejected-parameters-max-pdu-length](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unknown-message-type** *number*

**Description** The number of notification messages sent to advise of an unknown message type

**Context** [network-instance name](#) *string* [protocols ldp statistics protocol-errors unknown-message-type](#) *number*

**Tree** [unknown-message-type](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unknown-tlv** *number*

**Description** The number of notification messages sent to advise of an unknown TLV

**Context** [network-instance name](#) *string* [protocols ldp statistics protocol-errors unknown-tlv](#) *number*

**Tree** [unknown-tlv](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unsupported-address-family** *number*

<b>Description</b>	The number of notification messages sent to advise that a TCP connection was closed because the FEC type is not IPv4 or IPv6
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics protocol-errors unsupported-address-family</a> <i>number</i>
<b>Tree</b>	<a href="#">unsupported-address-family</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sessions-terminated-holdtime-expiry** *number*

<b>Description</b>	The total number of LDP sessions that were terminated due to keepalive holdtime expiry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp statistics sessions-terminated-holdtime-expiry</a> <i>number</i>
<b>Tree</b>	<a href="#">sessions-terminated-holdtime-expiry</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-down-damp-time** *number*

<b>Description</b>	Configure the time interval that LDP damps a tunnel down event
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp tunnel-down-damp-time</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel-down-damp-time</a>
<b>Range</b>	0 to 20
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**linux**

<b>Description</b>	Enables routing interaction with the Linux kernel
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">linux</a>
<b>Tree</b>	<a href="#">linux</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-neighbors** *boolean*

<b>Description</b>	Export neighbors to linux routing table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">linux</a> <a href="#">export-neighbors</a> <i>boolean</i>
<b>Tree</b>	<a href="#">export-neighbors</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-routes** *boolean*

<b>Description</b>	Export routes to linux routing table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">linux</a> <a href="#">export-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">export-routes</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**import-routes** *boolean*

<b>Description</b>	Import routes from linux routing table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">linux</a> <a href="#">import-routes</a> <i>boolean</i>
<b>Tree</b>	<a href="#">import-routes</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mld**

<b>Description</b>	Enable the mld context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld</a>

<b>Tree</b>	<a href="#">mld</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the MLD instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-count** *number*

<b>Description</b>	The number of multicast groups which have been learned on this instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface** [interface-name](#) *string*

<b>Description</b>	List of MLD interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the MLD protocol for this interface Used to administratively enable or disable the MLD protocol on a routed subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-count** *number*

<b>Description</b>	The number of multicast groups which have been learned on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**import-policy** *reference*

<b>Description</b>	Apply an import policy. The length of the policy name should not exceed 32 characters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">import-policy reference</a>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-group-sources** *number*

<b>Description</b>	MAX number of MLD group/source combinations for this interface, 0 means no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-group-sources</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-groups** *number*

<b>Description</b>	MAX number of MLD Groups for this interface, 0 means no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-groups</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-sources** *number*

<b>Description</b>	MAX number of MLD sources per group for this interface, 0 means no limit
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-sources</a>
<b>Range</b>	1 to 512
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**membership-groups**

<b>Description</b>	List of MLD Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **expiry-time** *number*

**Description** The time left before multicast group timeout

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* **expiry-time** *number*

**Tree** [expiry-time](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **filter-mode** *keyword*

**Description** Enter the filter-mode context

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* **filter-mode** *keyword*

**Tree** [filter-mode](#)

**Options**

- include
 

In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter
- exclude
 

In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group-type** *keyword*

**Description** Enter the group-type context

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* **group-type** *keyword*

**Tree** [group-type](#)

**Options**

- static

This group entry was statically configured.

- dynamic

This group entry was learned by the protocol.

- bgp-smet

This group entry was learned from a bgp SMET route.

- bgp-sync

This group entry was learned from a bgp JOIN SYNC route.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-reporter** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The last host address which has sent the report to join the multicast group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <b>last-reporter</b> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">last-reporter</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mld-compatibility-mode** *keyword*

<b>Description</b>	Compatibility with older version routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <b>mld-compatibility-mode</b> <i>keyword</i>
<b>Tree</b>	<a href="#">mld-compatibility-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
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**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string*

**Tree** [source](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** *string*

**Description** Source address of multicast

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string*

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **expiry-time** *number*

**Description** The time left before multicast group timeout

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string* [expiry-time](#) *number*

**Tree** [expiry-time](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **forwarding-state** *keyword*

**Description** Traffic forwarding state on this port

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string* [forwarding-state](#) *keyword*

**Tree** [forwarding-state](#)

**Options**

- forward
- block

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-type *keyword*

**Description** Enter the source-type context

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string* [source-type keyword](#)

**Tree** [source-type](#)

**Options**

- static  
This group entry was statically configured.
- dynamic  
This group entry was learned by the protocol.
- bgp-smet  
This group entry was learned from a bgp SMET route.
- bgp-sync  
This group entry was learned from a bgp JOIN SYNC route.

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### up-time *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string* [up-time string](#)

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### up-time *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups group group](#) *string* [up-time string](#)

<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **v1-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 1 members.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">v1-host-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	The operational state of the MLD interface. This simply tracks the operational state of the subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed</li> </ul>

- Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-version number****Description**

The operational MLD version on this interface

**Context**[network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [oper-version number](#)**Tree**[oper-version](#)**Range**

1 to 2

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**querier****Description**

Enter the querier context



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">querier</a>
<b>Tree</b>	<a href="#">querier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	The address of the MLD Querier on the IP subnet to which this interface is attached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">querier address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expiry-time** *number*

<b>Description</b>	The time remaining before this querier is aged out
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">querier expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-time** *string*

<b>Description</b>	The time since this querier was last elected
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">querier up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### query-interval *number*

**Description** Interval at which the router sends the mld membership queries

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [query-interval](#) *number*

**Tree** [query-interval](#)

**Range** 2 to 1024

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### query-last-member-interval *number*

**Description** Interval at which Group-Specific-Query packets are transmitted

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [query-last-member-interval](#) *number*

**Tree** [query-last-member-interval](#)

**Range** 1 to 1023

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### query-response-interval *number*

**Description** Time to wait to receive a response to the MLD membership query from the host

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [query-response-interval](#) *number*

**Tree** [query-response-interval](#)

**Range** 1 to 1023

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-alert-check** *boolean*

<b>Description</b>	Enable or disable router alert checking for MLD messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">router-alert-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	Container to configure Source specific multicast (SSM) options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mappings**

<b>Description</b>	A list of source specific multicast (SSM) mappings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">ssm mappings</a>
<b>Tree</b>	<a href="#">mappings</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range** [start](#) *string* [end](#) *string*

<b>Description</b>	A Source Specific Multicast (SSM) mapping  This allows MLD v2 hosts to be able to join in SSM environments by translating MLD v1 reports into MLD v2 reports. The request in an MLD v1 join is sent toward the source address found by matching the multicast address.
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**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [ssm mappings group-range start](#) *string* [end](#) *string*

**Tree** [group-range](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **start** *string*

**Description** start of the group range

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [ssm mappings group-range start](#) *string* [end](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end** *string*

**Description** end of the group range

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [ssm mappings group-range start](#) *string* [end](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** [source](#) *string*

**Description** Multicast source address list

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [ssm mappings group-range start](#) *string* [end](#) *string* [source](#) [source](#) *string*

**Tree** [source](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Min. Elements** 1

**source string**

<b>Description</b>	Multicast source address
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string ssm mappings group-range start string end string source source string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static-membership-groups**

<b>Description</b>	Container to configure static <S,G>s for this interface
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups</a>
<b>Tree</b>	<a href="#">static-membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range start string end string**

<b>Description</b>	Enter the group-range list instance
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string</a>
<b>Tree</b>	<a href="#">group-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start string**

<b>Description</b>	start of the group range
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end string**

<b>Description</b>	end of the group range
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source source string**

<b>Description</b>	Multicast source address list
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source string**

<b>Description</b>	Multicast source address
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string source source string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**starg**

<b>Description</b>	any source address (*,G)
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string static-membership-groups group-range start string end string starg</a>
<b>Tree</b>	<a href="#">starg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Global MLD statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**error**

<b>Description</b>	Error message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error</a>
<b>Tree</b>	<a href="#">error</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-encoding** *number*

<b>Description</b>	Badly encoded
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error bad-encoding</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-encoding</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-length** *number*

<b>Description</b>	Bad length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error bad-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-length</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### import-policy-drops *number*

<b>Description</b>	Number of times we matched the host IP address or group or source addresses specified in the import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error import-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">import-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-scope *number*

<b>Description</b>	Link-local scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error local-scope</a> <i>number</i>
<b>Tree</b>	<a href="#">local-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### missing-router-alert *number*

<b>Description</b>	Router alert flag is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error missing-router-alert</a> <i>number</i>
<b>Tree</b>	<a href="#">missing-router-alert</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**non-local** *number*

<b>Description</b>	Non-local sender source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error non-local</a> <i>number</i>
<b>Tree</b>	<a href="#">non-local</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-of-memory-drops** *number*

<b>Description</b>	Number of times a join is dropped because we ran out of memory
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error out-of-memory-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">out-of-memory-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reached-maximum-number-group-sources** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number group-source combinations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-group-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reached-maximum-number-groups** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number of groups.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-groups</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reached-maximum-number-sources** *number*

<b>Description</b>	Number of times a join is dropped because we reached the maximum number of sources per group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reserved-scope** *number*

<b>Description</b>	Reserved scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error reserved-scope</a> <i>number</i>
<b>Tree</b>	<a href="#">reserved-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unknown-type** *number*

<b>Description</b>	Unknown type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error unknown-type</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### wrong-version *number*

<b>Description</b>	Wrong version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics error wrong-version</a> <i>number</i>
<b>Tree</b>	<a href="#">wrong-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multicast-states

<b>Description</b>	Multicast state count for this network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states</a>
<b>Tree</b>	<a href="#">multicast-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-group-entries *number*

<b>Description</b>	The number of (S,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states source-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">source-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**star-group-entries** *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states star-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">star-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received**

<b>Description</b>	Received message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**drops** *number*

<b>Description</b>	Total number of dropped packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received drops</a> <i>number</i>
<b>Tree</b>	<a href="#">drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-queries *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-source-queries *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### leaves *number*

<b>Description</b>	Leaves
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received leaves</a> <i>number</i>
<b>Tree</b>	<a href="#">leaves</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics received v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted**

<b>Description</b>	Transmit message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**errors** *number*

<b>Description</b>	Transmission Errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics transmitted errors</a> <i>number</i>
<b>Tree</b>	<a href="#">errors</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### general-queries *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics transmitted general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-queries *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-source-queries *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version number**

<b>Description</b>	MLD Version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">version number</a>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 2
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**membership-groups**

<b>Description</b>	List of MLD Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	False



**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source *source string*

**Description** Source addresses of multicast

**Context** [network-instance name string protocols mld membership-groups group group string source source string](#)

**Tree** [source](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source *string*

**Description** Source address of multicast

**Context** [network-instance name string protocols mld membership-groups group group string source source string](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### blocked-interface *interface-name string*

**Description** Add a list entry for blocked-interface

**Context** [network-instance name string protocols mld membership-groups group group string source source string blocked-interface interface-name string](#)

**Tree** [blocked-interface](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

**Description** Reference to a specific subinterface of the form <interface-name>.<subinterface-index>

**Context** [network-instance name string protocols mld membership-groups group group string source source string blocked-interface interface-name string](#)

**String Length** 5 to 25

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-interface *interface-name string*

<b>Description</b>	Add a list entry for forwarding-interface
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols mld membership-groups group group string</a> <a href="#">source source string</a> <a href="#">forwarding-interface interface-name string</a>
<b>Tree</b>	<a href="#">forwarding-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols mld membership-groups group group string</a> <a href="#">source source string</a> <a href="#">forwarding-interface interface-name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

<b>Description</b>	Used to report operational state of the MLD instance
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">protocols mld oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> </ul>

- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-interval** *number***Description**

Interval at which the router sends the mld membership queries

**Context**[network-instance name](#) *string protocols mld query-interval number***Tree**[query-interval](#)**Range**

2 to 1024

**Default**

125

**Configurable**

True

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-last-member-interval** *number*

<b>Description</b>	Interval at which Group-Specific-Query packets are transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld query-last-member-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-last-member-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**query-response-interval** *number*

<b>Description</b>	Time to wait to receive a response to the MLD membership query from the host
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld query-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-response-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**robust-count** *number*

<b>Description</b>	Tune MLD robustness to allow for expected packet loss  The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	2 to 10
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	Container to configure Source specific multicast (SSM) options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mappings**

<b>Description</b>	A list of source specific multicast (SSM) mappings
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld ssm mappings</a>
<b>Tree</b>	<a href="#">mappings</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range** [start](#) *string* [end](#) *string*

<b>Description</b>	A Source Specific Multicast (SSM) mapping  This allows MLD v2 hosts to be able to join in SSM environments by translating MLD v1 reports into MLD v2 reports. The request in an MLD v1 join is sent toward the source address found by matching the multicast address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld ssm mappings group-range start</a> <i>string</i> <a href="#">end</a> <i>string</i>
<b>Tree</b>	<a href="#">group-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start** *string*

<b>Description</b>	start of the group range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld ssm mappings group-range start</a> <i>string</i> <a href="#">end</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end string**

**Description** end of the group range

**Context** [network-instance name string protocols mld ssm mappings group-range start string end string](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source source string**

**Description** Multicast source address list

**Context** [network-instance name string protocols mld ssm mappings group-range start string end string source source string](#)

**Tree** [source](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Min. Elements** 1

### **source string**

**Description** Multicast source address

**Context** [network-instance name string protocols mld ssm mappings group-range start string end string source source string](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **trace-options**

**Description** Enter the trace-options context

**Context** [network-instance name string protocols mld trace-options](#)

**Tree** [trace-options](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trace

**Description** Tracing parameter flags

**Context** [network-instance name](#) *string* [protocols mld trace-options trace](#)

**Tree** [trace](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface

**Description** Enable tracing interface events.

**Context** [network-instance name](#) *string* [protocols mld trace-options trace interface](#)

**Tree** [interface](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all

**Description** Trace for all interfaces

**Context** [network-instance name](#) *string* [protocols mld trace-options trace interface all](#)

**Tree** [all](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *reference*

**Description** Trace for interface with this name

**Context** [network-instance name](#) *string* [protocols mld trace-options trace interface name \*reference\*](#)

**Tree** [name](#)

**Reference** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string*

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet

<b>Description</b>	Trace MLD Packet types Only one type can be enabled at a time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet</a>
<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface

<b>Description</b>	Enable interface filter for packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet interface</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all

<b>Description</b>	Trace for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet interface all</a>
<b>Tree</b>	<a href="#">all</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *reference*

<b>Description</b>	Trace for interface with this name
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet interface name <i>reference</i></a>



<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modifier** *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Default</b>	egress-ingress-and-dropped
<b>Options</b>	<ul style="list-style-type: none"> <li>dropped Enable tracing for the packets which are dropped</li> <li>ingress-and-dropped Enable tracing for the packets which are sent or received</li> <li>egress-ingress-and-dropped Enable tracing for the packets which are sent, received or dropped</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld trace-options trace packet type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>all Enable tracing of all MLD packets</li> <li>query Enable tracing of MLD Query packets</li> <li>v1-report Enable tracing of MLD version 1 Report packets</li> <li>v1-done Enable tracing of MLD version 1 Done packets</li> </ul>

- v2-report  
Enable tracing of MLD version 2 Report packets

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mld-snooping

<b>Description</b>	Enable the mld-snooping context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping</a>
<b>Tree</b>	<a href="#">mld-snooping</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable the MLD instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## interface [interface-name](#) *string*

<b>Description</b>	List of MLD interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface</a> <a href="#">interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**fast-leave** *boolean*

<b>Description</b>	Allow MLD fast leave processing When enabled, the multicast state is removed immediately upon receiving an MLD leave message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">fast-leave</a> <i>boolean</i>
<b>Tree</b>	<a href="#">fast-leave</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**import-policy** *reference*

<b>Description</b>	Apply an import policy. The length of the policy name should not exceed 32 characters.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**is-mrouter-port** *boolean*

<b>Description</b>	Interface Is a multicast router port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">is-mrouter-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-mrouter-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**maximum-number-group-sources** *number*

<b>Description</b>	Maximum number of MLD group/source combinations for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-group-sources</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**maximum-number-groups** *number*

<b>Description</b>	Maximum number of MLD Groups for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-groups</a>
<b>Range</b>	1 to 4096
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**maximum-number-sources** *number*

<b>Description</b>	Maximum number of MLD sources per group for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-sources</a>

<b>Range</b>	1 to 512
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### membership-group-count *number*

<b>Description</b>	The number of multicast groups which have been learned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### membership-groups

<b>Description</b>	List of MLD Membership information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group *string*

<b>Description</b>	Multicast address
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <i>expiry-time</i> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <i>filter-mode</i> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-type** *keyword*

<b>Description</b>	Enter the group-type context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">group-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">group-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>static</code> This group entry was statically configured.</li> <li>• <code>dynamic</code> This group entry was learned by the protocol.</li> <li>• <code>bgp-smet</code> This group entry was learned from a bgp SMET route.</li> <li>• <code>bgp-sync</code> This group entry was learned from a bgp JOIN SYNC route.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **mld-compatibility-mode** *keyword*

<b>Description</b>	Compatibility with older version routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">mld-compatibility-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mld-compatibility-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**forwarding-state** *keyword*

<b>Description</b>	Traffic forwarding state on this port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">forwarding-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• block</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-type** *keyword*

<b>Description</b>	Enter the source-type context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">source-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>static This group entry was statically configured.</li> <li>dynamic This group entry was learned by the protocol.</li> <li>bgp-smet This group entry was learned from a bgp SMET route.</li> <li>bgp-sync This group entry was learned from a bgp JOIN SYNC route.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-host-timer** *number*

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 1 members
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">v1-host-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mrouter-port** *boolean*

<b>Description</b>	Operate port as a multicast router port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">mrouter-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mrouter-port</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-interval** *number*

<b>Description</b>	Interval at which the router sends the MLD membership queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-interval</a>
<b>Range</b>	2 to 1024
<b>Default</b>	125
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**query-last-member-interval** *number*

<b>Description</b>	Interval at which Group-Specific-Query packets are transmitted
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When used along with EVPN multi-homing, the result of this value multiplied by the interface robust-count must be a value equal to or less than 25.5 seconds. This is due to the fact that the maximum response time field in the EVPN Multicast Leave Synch route has a limit of 255 units of 1/10 second, and this field encodes the result of  $[(\text{query-last-member-interval} * 10) * \text{robust-count}]$ .

If the result of that operation is greater than 255, the maximum response time in the EVPN Multicast Leave Synch route is still 255.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-last-member-interval</a>
<b>Range</b>	1 to 5
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **query-response-interval** *number*

<b>Description</b>	Time to wait to receive a response to the MLD membership query from the host
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-response-interval</a>
<b>Range</b>	1 to 1023
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **robust-count** *number*

<b>Description</b>	<p>Tune MLD robustness to allow for expected packet loss</p> <p>The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.</p> <p>When used along with EVPN multi-homing, the result of this value multiplied by the interface query-last-member-interval must be a value equal to or less than 25.5 seconds. This is due to the fact that the maximum response time field in the EVPN Multicast Leave Synch route has a limit of 255 units of 1/10</p>
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second, and this field encodes the result of  $[(\text{query-last-member-interval} * 10) * \text{robust-count}]$ .

If the result of that operation is greater than 255, the maximum response time in the EVPN Multicast Leave Synch route is still 255.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	2 to 10
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **router-alert-check** *boolean*

<b>Description</b>	Enable or disable router alert checking for MLD messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">router-alert-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **send-queries** *boolean*

<b>Description</b>	Generate MLD general queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">send-queries</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send-queries</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**static-membership-groups**

<b>Description</b>	Container to configure static <S,G>s for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups</a>
<b>Tree</b>	<a href="#">static-membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** [group](#) *string*

<b>Description</b>	Enter the group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	group address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Multicast source address list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">static-membership-groups group</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *string*

**Description** Multicast source address.

**Context** [network-instance name \*string\*](#) [protocols mld-snooping interface interface-name \*string\*](#) [static-membership-groups group group \*string\*](#) [source source \*string\*](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### starg

**Description** any source address (\*,G)

**Context** [network-instance name \*string\*](#) [protocols mld-snooping interface interface-name \*string\*](#) [static-membership-groups group group \*string\*](#) [starg](#)

**Tree** [starg](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### statistics

**Description** MLD sub-interface statistics

**Context** [network-instance name \*string\*](#) [protocols mld-snooping interface interface-name \*string\*](#) [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### error

**Description** Error message statistics

**Context** [network-instance name \*string\*](#) [protocols mld-snooping interface interface-name \*string\*](#) [statistics error](#)

**Tree** [error](#)

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-encoding** *number*

<b>Description</b>	Badly encoded packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-encoding</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-encoding</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-length** *number*

<b>Description</b>	Bad length
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-length</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-length</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bad-mld-checksum** *number*

<b>Description</b>	Number of times a packet is discarded because of a bad MLD header checksum
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error bad-mld-checksum</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-mld-checksum</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**discarded-bgp-join-sync** *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error discarded-bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-bgp-join-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**discarded-bgp-leave-sync** *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error discarded-bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**import-policy-drops** *number*

<b>Description</b>	Number of times the host IP address or group or source IP addresses specified in the import policy are matched
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error import-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">import-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**local-scope** *number*

<b>Description</b>	Link-local scope multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error local-scope</a> <i>number</i>
<b>Tree</b>	<a href="#">local-scope</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**missing-router-alert** *number*

<b>Description</b>	Router alert flag is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error missing-router-alert</a> <i>number</i>
<b>Tree</b>	<a href="#">missing-router-alert</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**out-of-memory-discarded-packets** *number*

<b>Description</b>	Number of times a join is discarded because the router ran out of memory
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error out-of-memory-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-of-memory-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**reached-maximum-number-group-sources** *number*

<b>Description</b>	Number of times a join is discarded because the maximum number of group-source combinations is reached
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-group-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-group-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **reached-maximum-number-groups** *number*

<b>Description</b>	Number of times a join is discarded because the maximum number of groups is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-groups</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **reached-maximum-number-sources** *number*

<b>Description</b>	Number of times a join is discarded because the maximum number of sources per group is reached
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error reached-maximum-number-sources</a> <i>number</i>
<b>Tree</b>	<a href="#">reached-maximum-number-sources</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **send-query-configured-discarded-packets** *number*

<b>Description</b>	Number of times a query is discarded because send-queries is configured in the sub-interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error send-query-configured-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">send-query-configured-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **unknown-type** *number*

<b>Description</b>	Unknown type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error unknown-type</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **wrong-version** *number*

<b>Description</b>	Wrong version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error wrong-version</a> <i>number</i>
<b>Tree</b>	<a href="#">wrong-version</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **zero-source-ip-address** *number*

<b>Description</b>	Number of times a packet is discarded because it has a zero source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics error zero-source-ip-address</a> <i>number</i>
<b>Tree</b>	<a href="#">zero-source-ip-address</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## forwarded

<b>Description</b>	Forward message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded</a>
<b>Tree</b>	<a href="#">forwarded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## error-packets *number*

<b>Description</b>	Forwarding Errors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## general-queries *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded leave-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**unknown-type** *number*

<b>Description</b>	Unknown MLD types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded unknown-type</a> <i>number</i>

<b>Tree</b>	<a href="#">unknown-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics forwarded v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **multicast-states**

<b>Description</b>	Multicast state count for this network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states</a>
<b>Tree</b>	<a href="#">multicast-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-group-entries** *number*

<b>Description</b>	The number of (S,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states source-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">source-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**star-group-entries** *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics multicast-states star-group-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">star-group-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**received**

<b>Description</b>	Received message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**bgp-join-sync** *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-join-sync</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **bgp-leave-sync** *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **discarded-packets** *number*

<b>Description</b>	Total number of discarded MLD packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received group-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received leave-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received v1-reports</a> <i>number</i>

<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics received v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**transmitted**

<b>Description</b>	Transmit message statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**bgp-join-sync** *number*

<b>Description</b>	Bgp join sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted bgp-join-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-join-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**bgp-leave-sync** *number*

<b>Description</b>	Bgp leave sync routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted bgp-leave-sync</a> <i>number</i>
<b>Tree</b>	<a href="#">bgp-leave-sync</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**error-packets** *number*

<b>Description</b>	Transmission error MLD packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-queries** *number*

<b>Description</b>	General Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted general-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">general-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-queries** *number*

<b>Description</b>	Group Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-queries</a> <i>number</i>

<b>Tree</b>	<a href="#">group-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **group-source-queries** *number*

<b>Description</b>	Group and Source Specific Queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted group-source-queries</a> <i>number</i>
<b>Tree</b>	<a href="#">group-source-queries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **leave-messages** *number*

<b>Description</b>	Leave messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted leave-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">leave-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-reports** *number*

<b>Description</b>	V1 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted v1-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v1-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-reports** *number*

<b>Description</b>	V2 Reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics transmitted v2-reports</a> <i>number</i>
<b>Tree</b>	<a href="#">v2-reports</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version** *number*

<b>Description</b>	MLD Version
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">version</a> <i>number</i>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 2
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**multicast-routers** [address](#) *string*

<b>Description</b>	Enter the multicast-router list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i>
<b>Tree</b>	<a href="#">multicast-routers</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address** *string*

<b>Description</b>	The source IP address used by queries sent out by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **expiry-time** *number*

<b>Description</b>	The time remaining before this multicast router is aged out
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <b>expiry-time</b> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **interface** *string*

<b>Description</b>	Interface behind which this multicast router is located
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <b>interface</b> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **mld-v2-states**

<b>Description</b>	Enter the mld-v2-states context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <b>mld-v2-states</b>
<b>Tree</b>	<a href="#">mld-v2-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-query-interval** *number*

<b>Description</b>	The General Query Interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <a href="#">mld-v2-states general-query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-query-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**general-response-interval** *number*

<b>Description</b>	The General Query Response interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <a href="#">mld-v2-states general-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-response-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	The Robust Count value used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <a href="#">mld-v2-states robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time since this multicast router has been known in this service
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version number**

<b>Description</b>	The version of the protocol that is sent by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping multicast-routers address</a> <i>string</i> <a href="#">version number</a>
<b>Tree</b>	<a href="#">version</a>
<b>Range</b>	1 to 2
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-state keyword**

<b>Description</b>	Used to report operational state of the MLD instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> </ul>



- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### proxy-evpn-membership-group-count *number*

<b>Description</b>	The number of multicast groups in proxy-evpn-membership-groups
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">proxy-evpn-membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### proxy-evpn-membership-groups

<b>Description</b>	EVPN Proxy Database created for the network-instance  The content of this table is used by the router to proxy the reports towards the remote PEs via BGP EVPN SMET (Selective Multicast Ethernet Tag) routes.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups</a>
<b>Tree</b>	<a href="#">proxy-evpn-membership-groups</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *group string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups group group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups group group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups group group</a> <i>string</i> <a href="#">filter-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *source string*

**Description** Source addresses of multicast

**Context** [network-instance name string](#) [protocols mld-snooping proxy-evpn-membership-groups group group string](#) [source source string](#)

**Tree** [source](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *string*

**Description** Source address of multicast

**Context** [network-instance name string](#) [protocols mld-snooping proxy-evpn-membership-groups group group string](#) [source source string](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### up-time *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name string](#) [protocols mld-snooping proxy-evpn-membership-groups group group string](#) [source source string](#) [up-time string](#)

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### up-time *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name string](#) [protocols mld-snooping proxy-evpn-membership-groups group group string](#) [up-time string](#)

<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v1-support** *boolean*

<b>Description</b>	MLD Version 1 is supported
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups group group</a> <i>string</i> <a href="#">v1-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">v1-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**v2-support** *boolean*

<b>Description</b>	MLD Version 2 is supported
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-evpn-membership-groups group group</a> <i>string</i> <a href="#">v2-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">v2-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**proxy-membership-group-count** *number*

<b>Description</b>	The number of multicast groups which have been learned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">proxy-membership-group-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## proxy-membership-groups

<b>Description</b>	Proxy Database created for the network-instance The content of this table is used by the router to proxy the reports towards the Querier, when the Querier is attached to a sub-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-membership-groups</a>
<b>Tree</b>	<a href="#">proxy-membership-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *string*

<b>Description</b>	Multicast address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## filter-mode *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping proxy-membership-groups group</a> <a href="#">group</a> <i>string</i> <a href="#">filter-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include</li> </ul>

In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter

- exclude

In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *source string***Description**

Source addresses of multicast

**Context**[network-instance name string protocols mld-snooping proxy-membership-groups group group string source source string](#)**Tree**[source](#)**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string***Description**

Source address of multicast

**Context**[network-instance name string protocols mld-snooping proxy-membership-groups group group string source source string](#)**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string***Description**

The time elapsed since this entry was created

**Context**[network-instance name string protocols mld-snooping proxy-membership-groups group group string source source string up-time string](#)**Tree**[up-time](#)**String Length**

20 to 32

**Configurable**

False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time** *string*

**Description** The time elapsed since this entry was created

**Context** [network-instance name](#) *string* [protocols mld-snooping proxy-membership-groups group group](#) *string* [up-time](#) *string*

**Tree** [up-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **querier**

**Description** Enter the querier context

**Context** [network-instance name](#) *string* [protocols mld-snooping querier](#)

**Tree** [querier](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **address** *string*

**Description** The source IP address used by queries sent out by this multicast router

**Context** [network-instance name](#) *string* [protocols mld-snooping querier address](#) *string*

**Tree** [address](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **expiry-time** *number*

**Description** The time remaining before this multicast router is aged out

**Context** [network-instance name](#) *string* [protocols mld-snooping querier expiry-time](#) *number*

**Tree** [expiry-time](#)

<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### interface *string*

<b>Description</b>	Interface behind which this multicast router is located
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier interface</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### mld-v2-states

<b>Description</b>	Enter the mld-v2-states context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier mld-v2-states</a>
<b>Tree</b>	<a href="#">mld-v2-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### general-query-interval *number*

<b>Description</b>	The General Query Interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier mld-v2-states</a> <a href="#">general-query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-query-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**general-response-interval** *number*

<b>Description</b>	The General Query Response interval used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier mld-v2-states general-response-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">general-response-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	The Robust Count value used by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier mld-v2-states robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**up-time** *string*

<b>Description</b>	The time since this multicast router has been known in this service
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**version** *number*

<b>Description</b>	The version of the protocol that is sent by this multicast router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier version</a> <i>number</i>
<b>Tree</b>	<a href="#">version</a>

<b>Range</b>	1 to 2
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### query-interval *number*

<b>Description</b>	Interval at which the router sends the MLD membership queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping query-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">query-interval</a>
<b>Range</b>	1 to 65535
<b>Default</b>	125
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### query-source-address *string*

<b>Description</b>	Source IP address used when generating MLD queries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping query-source-address</a> <i>string</i>
<b>Tree</b>	<a href="#">query-source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### report-source-address *string*

<b>Description</b>	Source IP address used when generating MLD reports
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping report-source-address</a> <i>string</i>
<b>Tree</b>	<a href="#">report-source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**robust-count** *number*

<b>Description</b>	Configures the MLD robustness to allow for the expected MLD packet loss The robust-count variable allows tuning for the expected packet loss on a subnet. If a subnet anticipates losses, the robust-count variable can be increased.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping robust-count</a> <i>number</i>
<b>Tree</b>	<a href="#">robust-count</a>
<b>Range</b>	1 to 255
<b>Default</b>	2
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**trace-options**

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**trace**

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping trace-options</a> <a href="#">trace</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**packet**

<b>Description</b>	Trace MLD Packet types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping trace-options</a> <a href="#">trace</a> <a href="#">packet</a>

<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### interface [interface-name](#) *string*

<b>Description</b>	List of interfaces to trace
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	8

### interface-name *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### modifier *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>dropped Enable tracing for the packets which are dropped</li> <li>ingress-and-dropped Enable tracing for the packets which are sent or received</li> <li>egress-ingress-and-dropped</li> </ul>

Enable tracing for the packets which are sent, received or dropped

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source-mac *source-mac string*

<b>Description</b>	List of source mac addresses to trace
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet</a> <a href="#">source-mac</a> <a href="#">source-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">source-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	8

### source-mac *string*

<b>Description</b>	Enter the source-mac context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">trace-options</a> <a href="#">trace packet</a> <a href="#">source-mac</a> <a href="#">source-mac</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### transmitted-bgp-smet-routes *number*

<b>Description</b>	Transmitted BGP SMET routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">transmitted-bgp-smet-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-bgp-smet-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### vxlan-destination *vtep (ipv4-address | ipv6-address) vni number*

<b>Description</b>	Enter the vxlan-destination list instance
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a>
<b>Tree</b>	<a href="#">vxlan-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **vtep** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **vni number**

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **index number**

<b>Description</b>	the next-hop-group-id (system allocated) for resolving the VXLAN termination endpoint
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**is-evpn-proxy** *boolean*

<b>Description</b>	vxlan-interface supports evpn-proxy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">is-evpn-proxy</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-evpn-proxy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**is-mrouter-port** *boolean*

<b>Description</b>	vxlan-interface is a multicast router port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">is-mrouter-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-mrouter-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**is-sbd** *boolean*

<b>Description</b>	Enter the is-sbd context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">is-sbd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">is-sbd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**membership-group-count** *number*

<b>Description</b>	The number of multicast groups which have been learned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-group-count</a> <i>number</i>
<b>Tree</b>	<a href="#">membership-group-count</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## membership-groups

**Description** List of MLD Membership information

**Context** [network-instance name](#) *string* [protocols mld-snooping vxlan-destination vtep \(ipv4-address | ipv6-address\)](#) [vni number](#) [membership-groups](#)

**Tree** [membership-groups](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *group string*

**Description** Multicast group membership

**Context** [network-instance name](#) *string* [protocols mld-snooping vxlan-destination vtep \(ipv4-address | ipv6-address\)](#) [vni number](#) [membership-groups group group string](#)

**Tree** [group](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *string*

**Description** Multicast address

**Context** [network-instance name](#) *string* [protocols mld-snooping vxlan-destination vtep \(ipv4-address | ipv6-address\)](#) [vni number](#) [membership-groups group group string](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## expiry-time *number*

**Description** The time left before multicast group timeout



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group</a> <i>string</i> <a href="#">expiry-time</a> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**filter-mode** *keyword*

<b>Description</b>	Enter the filter-mode context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group</a> <i>string</i> <a href="#">filter-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">filter-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>include In include mode, reception of packets sent to the specified multicast address is requested only from those IP source addresses listed in the source-list parameter</li> <li>exclude In exclude mode, reception of packets sent to the given multicast address is requested from all IP source addresses except those listed in the source-list parameter.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group-type** *keyword*

<b>Description</b>	Enter the group-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni</a> <i>number</i> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group</a> <i>string</i> <a href="#">group-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">group-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>static This group entry was statically configured.</li> <li>dynamic This group entry was learned by the protocol.</li> </ul>

- `bgp-smet`  
This group entry was learned from a bgp SMET route.
- `bgp-sync`  
This group entry was learned from a bgp JOIN SYNC route.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **mld-compatibility-mode** *keyword*

<b>Description</b>	Compatibility with older version routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group string</a> <a href="#">mld-compatibility-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mld-compatibility-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group string</a> <a href="#">source</a> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">vxlan-destination</a> <a href="#">vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group string</a> <a href="#">source</a> <a href="#">source</a> <i>string</i>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **expiry-time** *number*

<b>Description</b>	The time left before multicast group timeout
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string source source</a> <i>string</i> <b>expiry-time</b> <i>number</i>
<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **forwarding-state** *keyword*

<b>Description</b>	Traffic forwarding state on this port
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string source source</a> <i>string</i> <b>forwarding-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• block</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **source-type** *keyword*

<b>Description</b>	Enter the source-type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string source source</a> <i>string</i> <b>source-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> </ul> <p>This group entry was statically configured.</p>

- **dynamic**  
This group entry was learned by the protocol.
- **bgp-smet**  
This group entry was learned from a bgp SMET route.
- **bgp-sync**  
This group entry was learned from a bgp JOIN SYNC route.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time string**

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string source source string up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **up-time string**

<b>Description</b>	The time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name string protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address) vni number membership-groups group group string up-time string</a>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **v1-host-timer number**

<b>Description</b>	The time remaining until the local router will assume that there are no longer any version 1 members
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">membership-groups group group string</a> <a href="#">v1-host-timer number</a>
<b>Tree</b>	<a href="#">v1-host-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics

<b>Description</b>	vxlan-interface statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## discarded-smet *number*

<b>Description</b>	Total number of discarded smet routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics</a> <a href="#">discarded-smet number</a>
<b>Tree</b>	<a href="#">discarded-smet</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## received-smet *number*

<b>Description</b>	Total number of received smet routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping vxlan-destination vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">statistics</a> <a href="#">received-smet number</a>
<b>Tree</b>	<a href="#">received-smet</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## ospf

**Description** Top-level configuration and operational state for Open Shortest Path First (OSPF)

**Context** [network-instance name string protocols ospf](#)

**Tree** [ospf](#)

**Configurable** True

**Platforms** Supported on all platforms

## instance [name string](#)

**Description** List of OSPF protocol instances associated with this network-instance.

**Context** [network-instance name string protocols ospf instance name string](#)

**Tree** [instance](#)

**Configurable** True

**Platforms** Supported on all platforms

**Max. Elements** 3

## name [string](#)

**Description** The name of the OSPF instance

**Context** [network-instance name string protocols ospf instance name string](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** Supported on all platforms

## address-family [identityref](#)

**Description** The address family that this instance supports. Only valid for OSPFv3.

**Context** [network-instance name string protocols ospf instance name string address-family identityref](#)

**Tree** [address-family](#)

**Options**

- [ipv6-unicast](#)  
IPv6 unicast address family

- ipv4-unicast  
IPv4 unicast address family

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Used to administratively enable or disable the OSPF instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **advertise-router-capability** *keyword*

<b>Description</b>	Scope to advertise router-capability.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <b>advertise-router-capability</b> <i>keyword</i>
<b>Tree</b>	<a href="#">advertise-router-capability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• false</li> <li>• link</li> <li>• area</li> <li>• as</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **area** [area-id](#)

<b>Description</b>	The OSPF areas within which the local system exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <b>area</b> <a href="#">area-id</a>
<b>Tree</b>	<a href="#">area</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-id**

<b>Description</b>	the area identifier as a dotted-quad.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**active-interfaces** *number*

<b>Description</b>	The number of active interfaces in this area.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">active-interfaces</a> <i>number</i>
<b>Tree</b>	<a href="#">active-interfaces</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**advertise-router-capability** *boolean*

<b>Description</b>	Allow router advertisement capabilities
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">advertise-router-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-router-capability</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-bdr-rtr-count**

<b>Description</b>	The total number of area border routers reachable within this area.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">area-bdr-rtr-count</a>
<b>Tree</b>	<a href="#">area-bdr-rtr-count</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **area-range ip-prefix-mask** (*ipv4-prefix | ipv6-prefix*)

**Description** Enter the area-range context

**Context** [network-instance name string protocols ospf instance name string area area-id area-range ip-prefix-mask \(ipv4-prefix | ipv6-prefix\)](#)

**Tree** [area-range](#)

**Configurable** True

**Platforms** Supported on all platforms

### **ip-prefix-mask** (*ipv4-prefix | ipv6-prefix*)

**Description** ip-prefix with host bits set to 0

**Context** [network-instance name string protocols ospf instance name string area area-id area-range ip-prefix-mask \(ipv4-prefix | ipv6-prefix\)](#)

**Configurable** True

**Platforms** Supported on all platforms

### **advertise** *boolean*

**Description** Advertise summarized range of addresses to other areas

**Context** [network-instance name string protocols ospf instance name string area area-id area-range ip-prefix-mask \(ipv4-prefix | ipv6-prefix\) advertise boolean](#)

**Tree** [advertise](#)

**Default** true

**Configurable** True

**Platforms** Supported on all platforms

### **as-bdr-rtr-count**

**Description** The total number of autonomous system border routers reachable within this area.

**Context** [network-instance name string protocols ospf instance name string area area-id as-bdr-rtr-count](#)

**Tree** [as-bdr-rtr-count](#)

**Configurable** False

**Platforms** Supported on all platforms

### blackhole-aggregate *boolean*

**Description** Enables the creation of a blackhole for generated aggregates

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id](#) [blackhole-aggregate](#) *boolean*

**Tree** [blackhole-aggregate](#)

**Default** true

**Configurable** True

**Platforms** Supported on all platforms

### export-policy *reference*

**Description** Apply an export policy when summarizing from this area to other areas.. Summary LSAs for prefixes matching the policy will still be in the linkstate database but are not flooded.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id](#) [export-policy](#) *reference*

**Tree** [export-policy](#)

**Reference** [routing-policy policy name](#) *string*

**Configurable** True

**Platforms** Supported on all platforms

### full-spf-runs

**Description** The total number of times that complete SPF has been run on the router since OSPF was last enabled.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id](#) [full-spf-runs](#)

**Tree** [full-spf-runs](#)

**Configurable** False

**Platforms** Supported on all platforms

### interface [interface-name](#) *string*

**Description** List of OSPF interfaces

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface-name** *string*

<b>Description</b>	Router logical interface name.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administrative state of the OSPF
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-router-capability** *boolean*

<b>Description</b>	Allow router advertisement capabilities
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-router-capability</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise-subnet** *boolean*

<b>Description</b>	Advertise point-to-point interfaces as subnet routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>advertise-subnet</b> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise-subnet</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication**

<b>Description</b>	Container with authentication options that apply to all peers in this peer-group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>authentication</b>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**keychain** *reference*

<b>Description</b>	Reference to a keychain. The keychain type must be ospf
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>authentication keychain</b> <i>reference</i>
<b>Tree</b>	<a href="#">keychain</a>
<b>Reference</b>	<a href="#">system authentication keychain name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bad-packets**

<b>Description</b>	Bad packets counters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>bad-packets</b>
<b>Tree</b>	<a href="#">bad-packets</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

## auth-failures

**Description** The total number of OSPF packets received with an invalid authorization key since admin-state was last set to 'enabled'.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [bad-packets auth-failures](#)

**Tree** [auth-failures](#)

**Configurable** False

**Platforms** Supported on all platforms

## bad-area

**Description** The total number of OSPF packets received with an area mismatch since admin-state was last set to 'enabled'.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [bad-packets bad-area](#)

**Tree** [bad-area](#)

**Configurable** False

**Platforms** Supported on all platforms

## bad-auth-type

**Description** The total number of OSPF packets received with an invalid authorization type since admin-state was last set to 'enabled'.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [bad-packets bad-auth-type](#)

**Tree** [bad-auth-type](#)

**Configurable** False

**Platforms** Supported on all platforms

## bad-checksum

**Description** The count of LS-as received with bad checksums.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [bad-packets bad-checksum](#)

**Tree** [bad-checksum](#)

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<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### bad-dead-interval

<b>Description</b>	The total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets</a> <a href="#">bad-dead-interval</a>
<b>Tree</b>	<a href="#">bad-dead-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### bad-dest-address

<b>Description</b>	The total number of OSPF packets received with the incorrect IP destination address since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets</a> <a href="#">bad-dest-address</a>
<b>Tree</b>	<a href="#">bad-dest-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### bad-hello-interval

<b>Description</b>	the value of bad-hello-intervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets</a> <a href="#">bad-hello-interval</a>
<b>Tree</b>	<a href="#">bad-hello-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-length

<b>Description</b>	The total number of OSPF packets received with a total length not equal to the length given in the packet itself since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-length</a>
<b>Tree</b>	<a href="#">bad-length</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-neighbors

<b>Description</b>	The total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-neighbors</a>
<b>Tree</b>	<a href="#">bad-neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-network

<b>Description</b>	The total number of OSPF packets received with invalid network or mask since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-network</a>
<b>Tree</b>	<a href="#">bad-network</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-options

<b>Description</b>	The total number of OSPF packets received with an option that does not match those configured for this interface or area since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-options</a>

<b>Tree</b>	<a href="#">bad-options</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-packet-type

<b>Description</b>	The total number of OSPF packets received with an invalid OSPF packet type since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-packet-type</a>
<b>Tree</b>	<a href="#">bad-packet-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-version

<b>Description</b>	The total number of OSPF packets received with bad OSPF version numbers since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-version</a>
<b>Tree</b>	<a href="#">bad-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-virtual-link

<b>Description</b>	The total number of OSPF packets received that are destined to a virtual link that does not exist since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">bad-packets bad-virtual-link</a>
<b>Tree</b>	<a href="#">bad-virtual-link</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bdr-id

<b>Description</b>	the value of BDR-id indicates the router ID of the backup designated router.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">bdr-id</a>
<b>Tree</b>	<a href="#">bdr-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### dead-interval *number*

<b>Description</b>	Time OSPF waits without receiving Hello packets before declaring a neighbor down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">dead-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">dead-interval</a>
<b>Range</b>	2 to 65535
<b>Default</b>	40
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### dr-id

<b>Description</b>	the value of DR-id indicates the router ID of the designated router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">dr-id</a>
<b>Tree</b>	<a href="#">dr-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### events

<b>Description</b>	the value of events indicates the number of times this OSPF interface has changed its state, or an error has occurred.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">events</a>
<b>Tree</b>	<a href="#">events</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failure-detection**

<b>Description</b>	Options related to methods of detecting BGP session failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">failure-detection</a>
<b>Tree</b>	<a href="#">failure-detection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**enable-bfd** *boolean*

<b>Description</b>	Enables the use of BFD for liveliness detection
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">failure-detection enable-bfd</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-bfd</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-interval** *number*

<b>Description</b>	Time between OSPF Hellos of this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	1 to 65535
<b>Default</b>	10
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface-type** *keyword*

<b>Description</b>	Interface type to broadcast or point-to-point
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>interface-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">interface-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• broadcast</li> <li>• point-to-point</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-enabled-time** *string*

<b>Description</b>	the value of last-enabled-time indicates the sys-up-time value when ospf-if-admin-stat was last set to enabled (1) to run the ospf on this interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>last-enabled-time</b> <i>string</i>
<b>Tree</b>	<a href="#">last-enabled-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-event-time** *string*

<b>Description</b>	the value of last-event-time indicates the value of sys-up-time when an event was last associated with this OSPF interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>last-event-time</b> <i>string</i>
<b>Tree</b>	<a href="#">last-event-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ldp-synchronization**

<b>Description</b>	Container with configuration options and state that pertains to the operation of LDP-IGP synchronization on this interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## disable

<b>Description</b>	Disable LDP-IGP synchronization procedures on this interface, even if synchronization is enabled globally
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization</a> <a href="#">disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## duration *number*

<b>Description</b>	The length of time that the IGP interface has been in sync or out of sync
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization</a> <a href="#">duration</a> <i>number</i>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## end-of-lib *boolean*

<b>Description</b>	<p>When set to true, the IGP restores the normal metric for the IGP adjacency when learning from LDP that all label-FEC mappings have been received from the LDP peer, even if there is remaining time on the hold-down-timer.</p> <p>When set to false, the IGP always waits for the full duration of the hold-down-timer to restore the normal metric for the IGP adjacency.</p> <p>This overrides the global/instance level setting</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">ldp-synchronization</a> <a href="#">end-of-lib</a> <i>boolean</i>

<b>Tree</b>	<a href="#">end-of-lib</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hold-down-timer *number*

<b>Description</b>	The maximum amount of time that the IGP advertises a maximum metric for an interface, measured from the time that the LDP adjacency is re-established after going down.  This overrides the global/instance level setting
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string ldp-synchronization hold-down-timer number</a>
<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Range</b>	1 to 1800
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sync-state *keyword*

<b>Description</b>	The current state of the interface with respect to LDP-IGP sync
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string ldp-synchronization sync-state keyword</a>
<b>Tree</b>	<a href="#">sync-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>wait-for-LDP-adjacency The IGP is waiting for the LDP adjacency to come up. The interface is being advertised with max-metric</li> <li>hold-down-timer-active The LDP adjacency has come up and the IGP has started the hold-down-timer, waiting for either end-of-lib or hold-down-timer expiry. The interface is being advertised with max-metric</li> <li>end-of-lib-received The IGP received end-of-lib and has switched to normal operation. The interface is being advertised with a normal metric</li> <li>hold-down-timer-expired</li> </ul>

The IGP did not receive end-of-lib (or was configured to ignore it) but hold-down-timer has expired and normal metric is restored

- manual-exit

A tools command was performed to exit ldp-sync. Normal operation is resumed, max-metric is removed

- disabled

ldp-sync is not applicable on this interface

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**link-lsa-cksum-sum** *string***Description**

the value of link-lsa-cksum-sum indicates the 32-bit unsigned sum of the link-scope link-state advertisements' LS checksums contained in this link's link-state database. the sum can be used to determine if there has been a change in a router's link-state database, and to compare the link state database of two routers.

**Context**

[network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [link-lsa-cksum-sum](#) *string*

**Tree**

[link-lsa-cksum-sum](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**link-lsa-count****Description**

the value of link-lsa-count indicates the total number of link-scope link-state advertisements in this link's link-state database.

**Context**

[network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [link-lsa-count](#)

**Tree**

[link-lsa-count](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**local-ip-address** (*ipv4-address* | *ipv6-address*)**Description**

the value of local-ip-address indicates the IP address of this OSPF interface.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">local-ip-address</a> ( <i>ipv4-address   ipv6-address</i> )
<b>Tree</b>	<a href="#">local-ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### Isa-filter-out *keyword*

<b>Description</b>	LSA flooding reduction
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">isa-filter-out</a> <i>keyword</i>
<b>Tree</b>	<a href="#">isa-filter-out</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• all</li> <li>• except-own-rtrlsa</li> <li>• except-own-rtrlsa-and-defaults</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isa-totals

<b>Description</b>	The number of LSAs of each type in this interface's database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">isa-totals</a>
<b>Tree</b>	<a href="#">isa-totals</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### e-link-lsa

<b>Description</b>	The number of extended link LSAs in this interface's database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">isa-totals</a> <a href="#">e-link-lsa</a>
<b>Tree</b>	<a href="#">e-link-lsa</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

## link-lsa

**Description** The number of link LSAs in this interface's database.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [lsa-totals link-lsa](#)

**Tree** [link-lsa](#)

**Configurable** False

**Platforms** Supported on all platforms

## link-opaque-lsa

**Description** The number of link opaque LSAs in this interface's database.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [lsa-totals link-opaque-lsa](#)

**Tree** [link-opaque-lsa](#)

**Configurable** False

**Platforms** Supported on all platforms

## router-info-lsa

**Description** The number of link scoped router information LSAs in this interface's AS database.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [lsa-totals router-info-lsa](#)

**Tree** [router-info-lsa](#)

**Configurable** False

**Platforms** Supported on all platforms

## metric *number*

**Description** Explicit route cost metric that is applied to the interface.  
Setting the value to 0 or removing the metric will cause the metric to be derived from the link bandwidth and the reference-bandwidth

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [metric number](#)

**Tree** [metric](#)



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mtu number**

<b>Description</b>	MTU for the OSPF to use on the interface. For OSPFv3 this must be minimum 1280.  If the MTU defined here exceeds the actual IP-MTU of the interface, then the IP-MTU of the interface is used.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <i>mtu number</i>
<b>Tree</b>	<a href="#">mtu</a>
<b>Range</b>	512 to 9486
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor [router-id](#)**

<b>Description</b>	List of neighbors associated with this OSPF interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**router-id**

<b>Description</b>	The router-id advertised by the neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**address (*ipv4-address-with-zone | ipv6-address-with-zone*)**

<b>Description</b>	the value of address indicates the IP address of the neighbor associated with the local link.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **adjacency-state** *identityref*

<b>Description</b>	Current OSPF Neighbor state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">adjacency-state identityref</a>
<b>Tree</b>	<a href="#">adjacency-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• down <p>The initial state of a neighbor, indicating that no recent information has been received from the neighbor.</p> </li> <li>• attempt <p>Utilised for neighbors that are attached to NBMA networks, it indicates that no information has been recently received from the neighbor but that Hello packets should be directly sent to that neighbor.</p> </li> <li>• init <p>Indicates that a Hello packet has been received from the neighbor but bi-directional communication has not yet been established. That is to say that the local Router ID does not appear in the list of neighbors in the remote system's Hello packet.</p> </li> <li>• two-way <p>Communication between the local and remote system is bi-directional such that the local system's Router ID is listed in the received remote system's Hello packet.</p> </li> <li>• exstart <p>An adjacency with the remote system is being formed. The local system is currently transmitting empty database description packets in order to establish the primary/standby relationship for the adjacency.</p> </li> <li>• exchange <p>The local and remote systems are currently exchanging database description packets in order to determine which elements of their local LSDBs are out of date.</p> </li> <li>• loading</li> </ul>

The local system is sending Link State Request packets to the remote system in order to receive the more recently LSAs that were discovered during the Exchange phase of the procedure establishing the adjacency.

- full

The neighboring routers are fully adjacent such that both LSDBs are synchronized. The adjacency will appear in Router and Network LSAs

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### backup-designated-router

<b>Description</b>	Advertised backup designated router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id backup-designated-router</a>
<b>Tree</b>	<a href="#">backup-designated-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### dead-time *number*

<b>Description</b>	The remaining number of seconds remaining in the neighbor's dead time interval
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id dead-time</a> <i>number</i>
<b>Tree</b>	<a href="#">dead-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### designated-router

<b>Description</b>	Advertised designated router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id designated-router</a>
<b>Tree</b>	<a href="#">designated-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-established-time** *string*

<b>Description</b>	Time then OSPF neighbor was last established
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id last-established-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-established-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-event-time** *string*

<b>Description</b>	the value of last-event-time indicates the value of sys-up-time when the last event occurred that affected the adjacency to the neighbour.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id last-event-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-event-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-restart-time** *string*

<b>Description</b>	the value of last-restart-time indicates the last time the neighbor attempted restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id last-restart-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-restart-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**optional-capabilities**

<b>Description</b>	Advertised Optional Capabilities
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id optional-capabilities</a>

<b>Tree</b>	<a href="#">optional-capabilities</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **priority number**

<b>Description</b>	Router priority advertised by neighbor
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string neighbor router-id priority number</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **restart-helper-age number**

<b>Description</b>	the value of restart-helper-age indicates the remaining time in the current OSPF graceful restart interval, if the router is acting as a restart helper for the neighbor.
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string neighbor router-id restart-helper-age number</a>
<b>Tree</b>	<a href="#">restart-helper-age</a>
<b>Range</b>	0 to 1800
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **restart-helper-exit-rc keyword**

<b>Description</b>	the value of restart-helper-exit-rc indicates the outcome of the last attempt at acting as a graceful restart helper for the neighbor. none no restart has yet been attempted. in-progress A restart attempt is currently underway. completed the last restart completed successfully. timed-out the last restart timed out. topology-changed the last restart was aborted due to a topology change.
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string neighbor router-id restart-helper-exit-rc keyword</a>
<b>Tree</b>	<a href="#">restart-helper-exit-rc</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• in-progress</li> <li>• completed</li> <li>• timed-out</li> <li>• topology-changed</li> <li>• bfd-down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### restart-helper-status *keyword*

<b>Description</b>	the value of restart-helper-status indicates whether the router is acting as a graceful restart helper for the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id restart-helper-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">restart-helper-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-helping</li> <li>• helping</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### restart-reason (*number* | *keyword*)

<b>Description</b>	the value of restart-reason indicates the OSPF neighbor's graceful restart reason.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id restart-reason</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">restart-reason</a>
<b>Range</b>	4 to 4294967295
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• sw-restart</li> <li>• sw-reload</li> <li>• switch-red</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**retransmission-queue-length** *number*

<b>Description</b>	Enter the retransmission-queue-length context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">retransmission-queue-length</a> <i>number</i>
<b>Tree</b>	<a href="#">retransmission-queue-length</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**state-changes** *number*

<b>Description</b>	total numer of OSPF state changes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">state-changes</a> <i>number</i>
<b>Tree</b>	<a href="#">state-changes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**bad-mtu**

<b>Description</b>	the value of bad-MT-us indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">statistics bad-mtu</a>
<b>Tree</b>	<a href="#">bad-mtu</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-nbr-states

<b>Description</b>	the value of bad-nbr-states indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics bad-nbr-states</a>
<b>Tree</b>	<a href="#">bad-nbr-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-packets

<b>Description</b>	the value of bad-packets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics bad-packets</a>
<b>Tree</b>	<a href="#">bad-packets</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## bad-seq-nums

<b>Description</b>	the value of bad-seq-nums indicates the total number of times when a database description packet was received with a sequence number mismatch since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics bad-seq-nums</a>
<b>Tree</b>	<a href="#">bad-seq-nums</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## duplicates

<b>Description</b>	the value of duplicates indicates the total number of times when a duplicate database description packet was received during the exchange state since admin-state was last set to 'enabled'.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics duplicates</a>
<b>Tree</b>	<a href="#">duplicates</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## events

<b>Description</b>	the value of events indicates the number of times this neighbor relationship has changed state, or an error has occurred.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics events</a>
<b>Tree</b>	<a href="#">events</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## Isa-install-failed

<b>Description</b>	the value of Isa-install-failed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics Isa-install-failed</a>
<b>Tree</b>	<a href="#">Isa-install-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## Isa-not-in-lsdb

<b>Description</b>	the value of Isa-not-in-lsdb indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">neighbor router-id statistics Isa-not-in-lsdb</a>
<b>Tree</b>	<a href="#">Isa-not-in-lsdb</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**num-restarts**

<b>Description</b>	the value of num-restarts indicates the number of times the neighbor has attempted restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">statistics num-restarts</a>
<b>Tree</b>	<a href="#">num-restarts</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**option-mismatches**

<b>Description</b>	the value of option-mismatches indicates the total number of times when a LS update was received with an option mismatch since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">statistics option-mismatches</a>
<b>Tree</b>	<a href="#">option-mismatches</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**up-time** *number*

<b>Description</b>	the value of up-time indicates the uninterrupted time, in hundredths of seconds, the adjacency to this neighbour has been up.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor router-id</a> <a href="#">up-time</a> <i>number</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-count**

<b>Description</b>	The total number of OSPF neighbors adjacent on this interface, in a state of INIT or greater, since admin-state was last set to 'enabled'.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbor-count</a>
<b>Tree</b>	<a href="#">neighbor-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	the OSPF interface state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• down</li> <li>• loopback</li> <li>• waiting</li> <li>• point-to-point</li> <li>• designated-router</li> <li>• backup-designated-router</li> <li>• other-designated-router</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **packets**

<b>Description</b>	Packet counters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets</a>
<b>Tree</b>	<a href="#">packets</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **discarded**

<b>Description</b>	The total number of OSPF packets discarded since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets discarded</a>

<b>Tree</b>	<a href="#">discarded</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### retransmits

<b>Description</b>	The total number of OSPF retransmits since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">packets retransmits</a>
<b>Tree</b>	<a href="#">retransmits</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-db-description

<b>Description</b>	The total number of OSPF database description packets received since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">packets rx-db-description</a>
<b>Tree</b>	<a href="#">rx-db-description</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-hello

<b>Description</b>	The total number of OSPF hello packets received since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">packets rx-hello</a>
<b>Tree</b>	<a href="#">rx-hello</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-ls-ack

<b>Description</b>	The total number of link state acknowledgements received since admin-state was last set to 'enabled'.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets rx-ls-ack</a>
<b>Tree</b>	<a href="#">rx-ls-ack</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-ls-request

<b>Description</b>	The total number of link state requests (LS-rs) received since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets rx-ls-request</a>
<b>Tree</b>	<a href="#">rx-ls-request</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-ls-update

<b>Description</b>	The total number of link state updates (LS-us) received since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets rx-ls-update</a>
<b>Tree</b>	<a href="#">rx-ls-update</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### rx-total

<b>Description</b>	The total number of OSPF packets received since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets rx-total</a>
<b>Tree</b>	<a href="#">rx-total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tx-db-description

<b>Description</b>	The total number of OSPF database description packets transmitted since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets tx-db-description</a>
<b>Tree</b>	<a href="#">tx-db-description</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tx-hello

<b>Description</b>	The total number of OSPF hello packets transmitted since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets tx-hello</a>
<b>Tree</b>	<a href="#">tx-hello</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tx-ls-ack

<b>Description</b>	The total number of OSPF link state acknowledgements transmitted since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets tx-ls-ack</a>
<b>Tree</b>	<a href="#">tx-ls-ack</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tx-ls-request

<b>Description</b>	The total number of OSPF link state requests (LS-rs) transmitted since admin-state was last set to 'enabled'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">packets tx-ls-request</a>
<b>Tree</b>	<a href="#">tx-ls-request</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### tx-ls-update

**Description** The total number of OSPF link state updates (LS-us) transmitted since admin-state was last set to 'enabled'.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [packets tx-ls-update](#)

**Tree** [tx-ls-update](#)

**Configurable** False

**Platforms** Supported on all platforms

### tx-total

**Description** The total number of OSPF packets transmitted since admin-state was last set to 'enabled'.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [packets tx-total](#)

**Tree** [tx-total](#)

**Configurable** False

**Platforms** Supported on all platforms

### passive *boolean*

**Description** Allow interface to be advertised as an OSPF interface without running the OSPF protocol

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [passive boolean](#)

**Tree** [passive](#)

**Configurable** True

**Platforms** Supported on all platforms

### priority *number*

**Description** Priority of the interface to apply in the designated router election on the subnet

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [area area-id interface interface-name](#) *string* [priority number](#)

<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	0 to 255
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### retransmit-interval *number*

<b>Description</b>	Time before OSPF retransmits an unacknowledged LSA to a neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">retransmit-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">retransmit-interval</a>
<b>Range</b>	1 to 1800
<b>Default</b>	5
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace-options

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options</a> <a href="#">trace</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## adjacencies

<b>Description</b>	Enable tracing all adjacency events.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace adjacencies</a>
<b>Tree</b>	<a href="#">adjacencies</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## interfaces

<b>Description</b>	Enable tracing all interface events.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace interfaces</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## packet

<b>Description</b>	Trace OSPF Packet types Only one type can be enabled at a time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace packet</a>
<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## detail

<b>Description</b>	To enable detailed tracing. Includes both received and sent packets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace packet detail</a>
<b>Tree</b>	<a href="#">detail</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**modifier** *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace packet modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>ingress</b> To enable tracing for the packets which are received.</li> <li>• <b>egress</b> To enable tracing for the sent packets.</li> <li>• <b>in-and-egress</b> To enable tracing for both sent and received packets</li> <li>• <b>drop</b> To enable tracing for the sent packets.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id interface interface-name</a> <i>string</i> <a href="#">trace-options trace packet type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>all</b> Enable tracing of all OSPF packets</li> <li>• <b>hello</b> Enable tracing of OSPF Hello packets</li> <li>• <b>dbdescr</b> Enable tracing of OSPF database Descriptor packets</li> <li>• <b>ls-request</b> Enable tracing of OSPF link-state request packets</li> <li>• <b>ls-update</b> Enable tracing of OSPF link-state update packets</li> <li>• <b>ls-ack</b> Enable tracing of OSPF link-state Ack packets</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**transit-delay** *number*

<b>Description</b>	Time required to transmit an LSA on the interface, virtual link, or sham link
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <b>transit-delay</b> <i>number</i>
<b>Tree</b>	<a href="#">transit-delay</a>
<b>Range</b>	1 to 1800
<b>Default</b>	1
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-spf-run-time** *string*

<b>Description</b>	The sys-up-time when intra-area SPF was last run on this area.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <b>last-spf-run-time</b> <i>string</i>
<b>Tree</b>	<a href="#">last-spf-run-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**lsa-filter-totals**

<b>Description</b>	The number of LSAs not sent due to area policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <b>lsa-filter-totals</b>
<b>Tree</b>	<a href="#">lsa-filter-totals</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**export-filtered**

<b>Description</b>	The number of LSAs not sent due to area export policy.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-filter-totals</a> <a href="#">export-filtered</a>
<b>Tree</b>	<a href="#">export-filtered</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### import-filtered

<b>Description</b>	The number of LSAs not sent due to area import policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-filter-totals</a> <a href="#">import-filtered</a>
<b>Tree</b>	<a href="#">import-filtered</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### lsa-totals

<b>Description</b>	The number of LSAs of each type in this area's database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals</a>
<b>Tree</b>	<a href="#">lsa-totals</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### area-opaque-lsa

<b>Description</b>	The number of NSSA LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals</a> <a href="#">area-opaque-lsa</a>
<b>Tree</b>	<a href="#">area-opaque-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### asbr-summary-lsa

<b>Description</b>	The number of ASBR summary LSAs in this area's link-state database.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals asbr-summary-lsa</a>
<b>Tree</b>	<a href="#">asbr-summary-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### e-inter-area-prefix-lsa

<b>Description</b>	The number of OSPFv3 E-inter-area-prefix LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-inter-area-prefix-lsa</a>
<b>Tree</b>	<a href="#">e-inter-area-prefix-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### e-inter-area-router-lsa

<b>Description</b>	The number of OSPFv3 E-inter-area-router LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-inter-area-router-lsa</a>
<b>Tree</b>	<a href="#">e-inter-area-router-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### e-intra-area-prefix-lsa

<b>Description</b>	The number of OSPFv3 E-intra-area-prefix LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-intra-area-prefix-lsa</a>
<b>Tree</b>	<a href="#">e-intra-area-prefix-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## e-network-lsa

<b>Description</b>	The number of OSPFv3 E-network LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-network-lsa</a>
<b>Tree</b>	<a href="#">e-network-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## e-nssa-lsa

<b>Description</b>	The number of OSPFv3 E-NSSA LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-nssa-lsa</a>
<b>Tree</b>	<a href="#">e-nssa-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## e-router-lsa

<b>Description</b>	The number of OSPFv3 E-router LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals e-router-lsa</a>
<b>Tree</b>	<a href="#">e-router-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## inter-area-prefix-lsa

<b>Description</b>	The number of OSPFv3 inter-area-prefix LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals inter-area-prefix-lsa</a>
<b>Tree</b>	<a href="#">inter-area-prefix-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## inter-area-router-lsa

<b>Description</b>	The number of OSPFv3 inter-area-router LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals inter-area-router-lsa</a>
<b>Tree</b>	<a href="#">inter-area-router-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## intra-area-prefix-lsa

<b>Description</b>	The number of OSPFv3 intra-area-prefix LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals intra-area-prefix-lsa</a>
<b>Tree</b>	<a href="#">intra-area-prefix-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## network-lsa

<b>Description</b>	The number of network LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals network-lsa</a>
<b>Tree</b>	<a href="#">network-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## network-summary-lsa

<b>Description</b>	The number of network summary LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals network-summary-lsa</a>
<b>Tree</b>	<a href="#">network-summary-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**nssa-lsa**

<b>Description</b>	The number of NSSA LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals nssa-lsa</a>
<b>Tree</b>	<a href="#">nssa-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**router-info-lsa**

<b>Description</b>	The number of OSPFv3 router-info LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals router-info-lsa</a>
<b>Tree</b>	<a href="#">router-info-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**router-lsa**

<b>Description</b>	The number of router LSAs in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals router-lsa</a>
<b>Tree</b>	<a href="#">router-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total**

<b>Description</b>	The number of area scope LSAs within this area.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">lsa-totals total</a>
<b>Tree</b>	<a href="#">total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**total-lsa-cksum-sum** *string*

<b>Description</b>	The 32-bit unsigned sum of the area scope LSA checksums contained in this area's link-state database. The sum can be used to determine if there has been a change in a router's link-state database, and to compare the link-state database of two routers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals total-lsa-cksum-sum</a> <i>string</i>
<b>Tree</b>	<a href="#">total-lsa-cksum-sum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**unknown-lsa**

<b>Description</b>	The number of unknown LSA advertisements in this area's link-state database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id lsa-totals unknown-lsa</a>
<b>Tree</b>	<a href="#">unknown-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**nssa**

<b>Description</b>	This command creates the context to configure the associated OSPF or OSPF3 area as Not So Stubby Area (NSSA).  NSSAs are similar to stub areas in that no external routes are imported into the area from other OSPF areas. The major difference between a stub area and an NSSA is an NSSA has the capability to flood external routes that it learns throughout its area and via an ABR to the entire OSPF or OSPF3 domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa</a>
<b>Tree</b>	<a href="#">nssa</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-range ip-prefix-mask** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the area-range context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa area-range ip-prefix-mask</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">area-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ip-prefix-mask** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	ip-prefix with host bits set to 0
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa area-range ip-prefix-mask</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**advertise** *boolean*

<b>Description</b>	Advertise summarized range of addresses to other areas
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa area-range ip-prefix-mask</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">advertise</a> <i>boolean</i>
<b>Tree</b>	<a href="#">advertise</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**originate-default-route**

<b>Description</b>	Enter the originate-default-route context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa originate-default-route</a>
<b>Tree</b>	<a href="#">originate-default-route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**adjacency-check** *boolean*

<b>Description</b>	Default route to remove if there is no adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa originate-default-route adjacency-check</a> <i>boolean</i>
<b>Tree</b>	<a href="#">adjacency-check</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type-nssa** *boolean*

<b>Description</b>	Generate a default route using NSSA-LSA type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa originate-default-route type-nssa</a> <i>boolean</i>
<b>Tree</b>	<a href="#">type-nssa</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**redistribute-external** *boolean*

<b>Description</b>	Enables the redistribution of external routes into the Not So Stubby Area (NSSA) or an NSSA area border router (ABR) that is exporting the routes into non-NSSA areas
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa redistribute-external</a> <i>boolean</i>
<b>Tree</b>	<a href="#">redistribute-external</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**summaries** *boolean*

<b>Description</b>	Enables sending summary (type 3) advertisements into a stub area or Not So Stubby Area (NSSA) on an Area Border Router (ABR)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id nssa summaries</a> <i>boolean</i>

<b>Tree</b>	<a href="#">summaries</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## stub

<b>Description</b>	Enable the stub context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id stub</a>
<b>Tree</b>	<a href="#">stub</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## default-metric *number*

<b>Description</b>	Defines the default OSPF metric for associated stub area
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id stub default-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">default-metric</a>
<b>Range</b>	1 to 65535
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## summaries *boolean*

<b>Description</b>	Enables sending summary (type 3) advertisements into a stub area or Not So Stubby Area (NSSA) on an Area Border Router (ABR)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id stub summaries</a> <i>boolean</i>
<b>Tree</b>	<a href="#">summaries</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-border-router** *boolean*

<b>Description</b>	This indicates whether this router is an area border router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area-border-router</a> <i>boolean</i>
<b>Tree</b>	<a href="#">area-border-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**as-border-router** *boolean*

<b>Description</b>	This indicates whether this router is an AS border router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">as-border-router</a> <i>boolean</i>
<b>Tree</b>	<a href="#">as-border-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**asbr**

<b>Description</b>	Configure the router as an ASBR (Autonomous System Boundary Router)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">asbr</a>
<b>Tree</b>	<a href="#">asbr</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**trace-path** (*number* | *keyword*)

<b>Description</b>	Domain identity
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">asbr</a> <a href="#">trace-path</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">trace-path</a>
<b>Range</b>	0 to 31
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> </ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **backbone-router** *boolean*

**Description** This indicates whether or not this router is configured as an OSPF back bone router.

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [backbone-router](#) *boolean*

**Tree** [backbone-router](#)

**Configurable** False

**Platforms** Supported on all platforms

### **export-limit**

**Description** Enter the export-limit context

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [export-limit](#)

**Tree** [export-limit](#)

**Configurable** True

**Platforms** Supported on all platforms

### **log-percent** *number*

**Description** Export limit at which warning a log message and SNMP notification are sent

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [export-limit log-percent](#) *number*

**Tree** [log-percent](#)

**Range** 1 to 100

**Configurable** True

**Platforms** Supported on all platforms

### **number** *number*

**Description** Maximum number of routes or prefixes to be exported into IGP instance from route table

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [export-limit number](#) *number*

**Tree** [number](#)

<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **export-policy** *reference*

<b>Description</b>	Apply an export policy to redistribute routes into OSPF
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **extern-lsa-cksum-sum** *string*

<b>Description</b>	the value of extern-lsa-cksum-sum indicates the 32-bit unsigned sum of the LS checksums of the external link-state advertisements contained in the link-state database. This sum can be used to determine if there has been a change in a router's link state database, and to compare the link-state database of two routers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">extern-lsa-cksum-sum</a> <i>string</i>
<b>Tree</b>	<a href="#">extern-lsa-cksum-sum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **extern-lsa-count**

<b>Description</b>	the value of extern-lsa-count indicates the number of external LS-as (LS type 0x4005) in the link-state database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">extern-lsa-count</a>
<b>Tree</b>	<a href="#">extern-lsa-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**external-db-overflow**

<b>Description</b>	Enable the external-db-overflow context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">external-db-overflow</a>
<b>Tree</b>	<a href="#">external-db-overflow</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interval** *number*

<b>Description</b>	Enter the interval context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">external-db-overflow interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	0 to 2147483647
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**limit** *number*

<b>Description</b>	Enter the limit context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">external-db-overflow limit</a> <i>number</i>
<b>Tree</b>	<a href="#">limit</a>
<b>Range</b>	0 to 2147483647
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**external-preference** *number*

<b>Description</b>	Configure the route preference associated with OSPF external routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">external-preference</a> <i>number</i>



<b>Tree</b>	<a href="#">external-preference</a>
<b>Default</b>	150
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## graceful-restart

<b>Description</b>	Container for options related to OSPF graceful restart
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## helper-mode *boolean*

<b>Description</b>	Enable or disable the OSPF graceful restart helper function. When this leaf is set, the local system supports retaining forwarding information during a neighbor router's restart.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">graceful-restart helper-mode</a> <i>boolean</i>
<b>Tree</b>	<a href="#">helper-mode</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## strict-lsa-checking *boolean*

<b>Description</b>	Enter the strict-lsa-checking context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">graceful-restart strict-lsa-checking</a> <i>boolean</i>
<b>Tree</b>	<a href="#">strict-lsa-checking</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**instance-id** *number*

<b>Description</b>	The OSPF multi instance identity as defined in RFC6549 or RFC5838. Supported values are: For OSPFv2 it is between 0 and 31, default is 0. For OSPFv3 address-family ipv6-unicast it is between 0 and 31, default is 0. For OSPFv3 address-family ipv4-unicast it is between 64 and 95, default is 64.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">instance-id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance-id</a>
<b>Range</b>	0 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-disabled-reason** *string*

<b>Description</b>	Reason why the disabled state was entered the last time.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-disabled-reason</a> <i>string</i>
<b>Tree</b>	<a href="#">last-disabled-reason</a>
<b>String Length</b>	0 to 20
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-enabled-time** *string*

<b>Description</b>	the value of last-enabled-time indicates the value of sys-up-time when admin-state was last set to 'enabled'. when admin-state is set to 'disabled', the OSPF counters are stopped when admin-state is reset to 'enabled', the counters are reset to zero.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-enabled-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-enabled-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-overflow-entered-time** *string*

<b>Description</b>	The value of last-ovrflw-entered-time indicates the value of sys-up-time the last time we entered overflow state. this overflow state occurs when the number of non-default AS-external-LS-as entries exceed the link-state database capability.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overflow-entered-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-overflow-entered-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-overflow-exit-time** *string*

<b>Description</b>	the value of last-overflow-exit-time indicates the value of sys-up-time the last time we exited overflow state. this overflow state occurs when the number of non-default AS-external-LS-as entries exceed the link-state database capability.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overflow-exit-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-overflow-exit-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-overload-enter-code** *keyword*

<b>Description</b>	the value of last-overload-enter-code indicates the condition which caused OSPF to get into overload.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overload-enter-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-overload-enter-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• spf-failed</li> <li>• boot-overload</li> <li>• manual-overload</li> <li>• sfm-overload</li> <li>• fib-add-fail</li> </ul>

	<ul style="list-style-type: none"> <li>• rtm-add-fail</li> <li>• rtr-adv-lsa-limit</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-overload-entered-time *string*

<b>Description</b>	the value of last-overload-entrd-time indicates the time at which the system last went into overload state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overload-entered-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-overload-entered-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-overload-exit-code *keyword*

<b>Description</b>	the value of last-overload-exit-code indicates the reason why OSPF came out of overload state the last time, since reset.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overload-exit-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-overload-exit-code</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• bgp-sig-recv</li> <li>• timer-expired</li> <li>• manual-exit</li> <li>• sfm-overload-done</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-overload-exit-time *string*

<b>Description</b>	the value of last-overload-exit-time indicates the time at which the system last came out of overload state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">last-overload-exit-time</a> <i>string</i>

<b>Tree</b>	<a href="#">last-overload-exit-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ldp-synchronization

<b>Description</b>	Enable LDP-IGP synchronization procedures on all P2P interfaces and all LAN interfaces with a single adjacency, except on interfaces where the functionality is explicitly disabled
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## end-of-lib *boolean*

<b>Description</b>	When set to true, the IGP restores the normal metric for the IGP adjacency when learning from LDP that all label-FEC mappings have been received from the LDP peer, even if there is remaining time on the hold-down-timer.  When set to false, the IGP always waits for the full duration of the hold-down-timer to restore the normal metric for the IGP adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ldp-synchronization end-of-lib</a> <i>boolean</i>
<b>Tree</b>	<a href="#">end-of-lib</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hold-down-timer *number*

<b>Description</b>	The maximum amount of time that the IGP advertises a maximum metric for an interface, measured from the time that the LDP adjacency is re-established after going down
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ldp-synchronization hold-down-timer</a> <i>number</i>

<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Range</b>	1 to 1800
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsa-totals

<b>Description</b>	The number of LSAs of each type in this instance's AS database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">lsa-totals</a>
<b>Tree</b>	<a href="#">lsa-totals</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### as-external-lsa

<b>Description</b>	The number of AS External LSAs in this instance's AS database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">lsa-totals</a> <a href="#">as-external-lsa</a>
<b>Tree</b>	<a href="#">as-external-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### as-opaque-lsa

<b>Description</b>	The number of AS opaque LSAs in this instance's AS database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">lsa-totals</a> <a href="#">as-opaque-lsa</a>
<b>Tree</b>	<a href="#">as-opaque-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### e-as-external-lsa

<b>Description</b>	The number of extended AS External LSAs in this instance's AS database.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">lsa-totals e-as-external-lsa</a>
<b>Tree</b>	<a href="#">e-as-external-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### router-info-lsa

<b>Description</b>	The number of AS scoped router information LSAs in this instance's AS database.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">lsa-totals router-info-lsa</a>
<b>Tree</b>	<a href="#">router-info-lsa</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### max-ecmp-paths *number*

<b>Description</b>	The maximum number of ECMP next-hops to program into the FIB for every IP prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">max-ecmp-paths</a> <i>number</i>
<b>Tree</b>	<a href="#">max-ecmp-paths</a>
<b>Range</b>	1 to 64
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### new-lsas-originated

<b>Description</b>	The number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">new-lsas-originated</a>
<b>Tree</b>	<a href="#">new-lsas-originated</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## new-lsas-received

<b>Description</b>	The number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">new-lsas-received</a>
<b>Tree</b>	<a href="#">new-lsas-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## opaque-lsa-support *boolean*

<b>Description</b>	the value of opaque-lsa-support indicates the router's support for opaque LSA types. this object is valid only when version is 'version2'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">opaque-lsa-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">opaque-lsa-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## oper-state *keyword*

<b>Description</b>	Used to report operational state of the OSPF instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• enable</li><li>• disable</li></ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## overflow *boolean*

<b>Description</b>	The value of in-overflow-state indicates the current overflow state (true/false). This overflow state occurs when the number of non-default AS-external-LS-as entries exceed the link-state database capability.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overflow</a> <i>boolean</i>
<b>Tree</b>	<a href="#">overflow</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**overflow**

<b>Description</b>	Enter the overflow context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overflow</a>
<b>Tree</b>	<a href="#">overflow</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**active** *boolean*

<b>Description</b>	Enter the active context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overflow</a> <a href="#">active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**overflow-include-ext-1** *boolean*

<b>Description</b>	Enter the overflow-include-ext-1 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overflow</a> <a href="#">overflow-include-ext-1</a> <i>boolean</i>
<b>Tree</b>	<a href="#">overflow-include-ext-1</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**overflow-include-ext-2** *boolean*

<b>Description</b>	Enter the overflow-include-ext-2 context
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-overload-include-ext-2</a> <i>boolean</i>
<b>Tree</b>	<a href="#">overload-include-ext-2</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **overload-include-stub** *boolean*

<b>Description</b>	Enter the overload-include-stub context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-overload-include-stub</a> <i>boolean</i>
<b>Tree</b>	<a href="#">overload-include-stub</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **overload-on-boot**

<b>Description</b>	Enable the overload-on-boot context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-overload-on-boot</a>
<b>Tree</b>	<a href="#">overload-on-boot</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **timeout** *number*

<b>Description</b>	Enter the timeout context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-overload-on-boot timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	60 to 1800
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## rtr-adv-lsa-limit

<b>Description</b>	Enter the rtr-adv-lsa-limit context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload rtr-adv-lsa-limit</a>
<b>Tree</b>	<a href="#">rtr-adv-lsa-limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## log-only *boolean*

<b>Description</b>	Enter the log-only context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload rtr-adv-lsa-limit log-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">log-only</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## max-lsa-count *number*

<b>Description</b>	Enter the max-lsa-count context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload rtr-adv-lsa-limit max-lsa-count</a> <i>number</i>
<b>Tree</b>	<a href="#">max-lsa-count</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## overload-timeout *number*

<b>Description</b>	Enter the overload-timeout context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload rtr-adv-lsa-limit overload-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">overload-timeout</a>
<b>Range</b>	1 to 1800
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**warning-threshold** *number*

<b>Description</b>	Enter the warning-threshold context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload rtr-adv-lsa-limit warning-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold</a>
<b>Range</b>	0 to 100
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**overload-rem-interval** *number*

<b>Description</b>	the value of overload-rem-interval indicates the time for which the system will be in overload state if OSPF is in overload state. the value of 0 implies that the system is indefinitely in overload state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-rem-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">overload-rem-interval</a>
<b>Range</b>	0 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**overload-state** *keyword*

<b>Description</b>	the value of overload-oper-state indicates whether or not the OSPF application is presently in overload state or not.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">overload-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• overload</li> <li>• no-overload</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ovld-lsa-limit-rem-interval** *number*

<b>Description</b>	the value of ovld-lsa-limit-rem-interval indicates the remaining time in seconds for which the system will be in overload state due to advertising router LSA limit exceeded. the value of 0 implies that the system is either not in overload or indefinitely in overload state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ovld-lsa-limit-rem-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">ovld-lsa-limit-rem-interval</a>
<b>Range</b>	0 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**preference** *number*

<b>Description</b>	Sets the route preference for OSPF sourced routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">preference</a> <i>number</i>
<b>Tree</b>	<a href="#">preference</a>
<b>Range</b>	1 to 255
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reference-bandwidth** *number*

<b>Description</b>	Configures the reference bandwidth that provides the basis for interface metrics based on link Bandwidth  If the reference bandwidth is defined, then the cost is calculated using the following formula: $\text{cost} = \text{reference-bandwidth} / \text{bandwidth}$  When a large reference-bandwidth value is configured, a metric calculation may result in a value higher than the supported protocol cost value. If this occurs, OSPF automatically reverts to the maximum configurable cost metric.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">reference-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-bandwidth</a>
<b>Range</b>	1 to 8000000000

<b>Default</b>	400000000
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### router-id

<b>Description</b>	Enter the router-id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">router-id</a>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### routes-submitted

<b>Description</b>	the value of routes-submitted indicates the number of routes submitted to the route table manager (RTM) by this instance of OSPF.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">routes-submitted</a>
<b>Tree</b>	<a href="#">routes-submitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### spf

<b>Description</b>	SPF related information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf</a>
<b>Tree</b>	<a href="#">spf</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### avg-spf-run-interval *number*

<b>Description</b>	the value of avg-spf-run-interval indicates the average time, in hundredths of seconds, of all the total SPF calculations performed by this OSPF router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf avg-spf-run-interval</a> <i>number</i>

<b>Tree</b>	<a href="#">avg-spf-run-interval</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ext-spf-runs

<b>Description</b>	The total number of times that only the external portion of the SPF has been run since OSPF was last enabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf ext-spf-runs</a>
<b>Tree</b>	<a href="#">ext-spf-runs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### full-spf-runs

<b>Description</b>	The total number of times that complete SPF has been run on the router since OSPF was last enabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf full-spf-runs</a>
<b>Tree</b>	<a href="#">full-spf-runs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### incremental-ext-spf-runs

<b>Description</b>	The total number of incremental SPF runs triggered by new or updated external LS-as.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf incremental-ext-spf-runs</a>
<b>Tree</b>	<a href="#">incremental-ext-spf-runs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## incremental-inter-spf-runs

<b>Description</b>	The total number of incremental SPF runs triggered by new or updated inter-area prefix or inter-area router LS-as.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf incremental-inter-spf-runs</a>
<b>Tree</b>	<a href="#">incremental-inter-spf-runs</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-ext-spf

<b>Description</b>	Information about the last external SPF run
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-ext-spf</a>
<b>Tree</b>	<a href="#">last-ext-spf</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## interval *number*

<b>Description</b>	the value of ext-spf-run-interval indicates the time, in hundredths of seconds, used to perform the most recent total external (not incremental) SPF calculation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-ext-spf interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## run-time *string*

<b>Description</b>	the value of last-ext-spf-run-time indicates the value of sys-up-time when the external OSPF dijkstra (SPF) was last run.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-ext-spf run-time</a> <i>string</i>



<b>Tree</b>	<a href="#">run-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-full-spf

<b>Description</b>	Information about the last full SPF run
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf</a>
<b>Tree</b>	<a href="#">last-full-spf</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### extern-spf-time *number*

<b>Description</b>	Time it took, in hundredths of seconds, to complete the external LSA calculations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf extern-spf-time</a> <i>number</i>
<b>Tree</b>	<a href="#">extern-spf-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### inter-spf-time *number*

<b>Description</b>	Time it took, in hundredths of seconds, to complete the inter-area SPF calculations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf inter-spf-time</a> <i>number</i>
<b>Tree</b>	<a href="#">inter-spf-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**intra-spf-time** *number*

<b>Description</b>	Time it took, in hundredths of seconds, to complete the intra-area SPF calculations.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf intra-spf-time</a> <i>number</i>
<b>Tree</b>	<a href="#">intra-spf-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**rtm-update-time** *number*

<b>Description</b>	Time it took, in hundredths of seconds, to complete the RTM updates.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf rtm-update-time</a> <i>number</i>
<b>Tree</b>	<a href="#">rtm-update-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**run-time** *string*

<b>Description</b>	the value of last-full-spf-run-time indicates the time at which the system last performed a full dijkstra (SPF) run.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf run-time</a> <i>string</i>
<b>Tree</b>	<a href="#">run-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-time** *number*

<b>Description</b>	Time it took, in hundredths of seconds, to complete the last SPF run completely.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf last-full-spf total-time</a> <i>number</i>
<b>Tree</b>	<a href="#">total-time</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-spf-run-interval** *number*

<b>Description</b>	the value of max-spf-run-interval indicates the maximum time, in hundredths of seconds, used to perform a total SPF calculation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf max-spf-run-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">max-spf-run-interval</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**min-spf-run-interval** *number*

<b>Description</b>	the value of min-spf-run-interval indicates the minimum time, in hundredths of seconds, used to perform a total SPF calculation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf min-spf-run-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">min-spf-run-interval</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	centiseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**spf-attempts-failed**

<b>Description</b>	The number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">spf spf-attempts-failed</a>
<b>Tree</b>	<a href="#">spf-attempts-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**timers**

<b>Description</b>	Enter the timers context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers</a>
<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**incremental-spf-wait** *number*

<b>Description</b>	Delay time before an incremental SPF calculation is started
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers incremental-spf-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">incremental-spf-wait</a>
<b>Range</b>	0 to 1000
<b>Default</b>	1000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lsa-accumulate** *number*

<b>Description</b>	Delay time for accumulating multiple LSAs before advertising them to neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers lsa-accumulate</a> <i>number</i>
<b>Tree</b>	<a href="#">lsa-accumulate</a>
<b>Range</b>	0 to 1000

<b>Default</b>	1000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isa-arrival *number*

<b>Description</b>	Minimum delay between receipt of the same LSAs arriving from neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers isa-arrival</a> <i>number</i>
<b>Tree</b>	<a href="#">isa-arrival</a>
<b>Range</b>	0 to 600000
<b>Default</b>	1000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isa-generate

<b>Description</b>	Enter the isa-generate context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers isa-generate</a>
<b>Tree</b>	<a href="#">isa-generate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### Isa-initial-wait *number*

<b>Description</b>	First waiting period between link state advertisements LSA originates
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers isa-generate isa-initial-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">isa-initial-wait</a>
<b>Range</b>	10 to 600000
<b>Default</b>	5000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lsa-second-wait** *number*

<b>Description</b>	Hold time between the first and second LSA generation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers lsa-generate lsa-second-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">lsa-second-wait</a>
<b>Range</b>	10 to 600000
<b>Default</b>	5000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**max-lsa-wait** *number*

<b>Description</b>	Maximum time between two consecutive occurrences of an LSA being generated
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers lsa-generate max-lsa-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">max-lsa-wait</a>
<b>Range</b>	10 to 600000
<b>Default</b>	5000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**redistribute-delay** *number*

<b>Description</b>	Hold down timer for external routes that are redistributed in OSPF
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers redistribute-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">redistribute-delay</a>
<b>Range</b>	0 to 1000
<b>Default</b>	1000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**spf-wait**

<b>Description</b>	Enter the spf-wait context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers spf-wait</a>
<b>Tree</b>	<a href="#">spf-wait</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**spf-initial-wait** *number*

<b>Description</b>	Initial SPF calculation delay after a topology change
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers spf-wait spf-initial-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">spf-initial-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	1000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**spf-max-wait** *number*

<b>Description</b>	Maximum interval between two consecutive SPF calculations
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers spf-wait spf-max-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">spf-max-wait</a>
<b>Range</b>	10 to 120000
<b>Default</b>	10000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**spf-second-wait** *number*

<b>Description</b>	Hold time between the first and second SPF calculation
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">timers spf-wait</a> <a href="#">spf-second-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">spf-second-wait</a>
<b>Range</b>	10 to 100000
<b>Default</b>	1000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### total-exported-routes

<b>Description</b>	the value of total-exported-routes indicates the total number of routes exported into OSPF from the route table manager when an export policy is configured. value of total-exported-routes would be 0 when no export policy is configured.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">total-exported-routes</a>
<b>Tree</b>	<a href="#">total-exported-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### trace-options

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trace

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options</a> <a href="#">trace</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## adjacencies

<b>Description</b>	Enable tracing all adjacency events.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace adjacencies</a>
<b>Tree</b>	<a href="#">adjacencies</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## graceful-restart

<b>Description</b>	Enable tracing all graceful-restart events.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace graceful-restart</a>
<b>Tree</b>	<a href="#">graceful-restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## interfaces

<b>Description</b>	Enable tracing all interface events.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace interfaces</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## lsdb

<b>Description</b>	Trace OSPF LSDB events Only one type can be enabled at a time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace lsdb</a>
<b>Tree</b>	<a href="#">lsdb</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**link-state-id** *string*

<b>Description</b>	Enter the link-state-id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace lsdb link-state-id</a> <i>string</i>
<b>Tree</b>	<a href="#">link-state-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**router-id** *string*

<b>Description</b>	Enter the router-id context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace lsdb router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace lsdb type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all Enable tracing of all LSDB events</li> <li>• router Enable tracing of LSDB router LSA events</li> <li>• network Enable tracing of OSPF LSDB network LSA events</li> <li>• summary Enable tracing of OSPF LSDB summary LSA events</li> <li>• nssa Enable tracing of OSPF LSDB NSSA LSA events</li> <li>• external Enable tracing of OSPF LSDB events for External LSA</li> <li>• opaque</li> </ul>

Enable tracing of OSPF LSDB events involving opaque LSA

- inter-area-prefix

Enable tracing of OSPF LSDB events for inter-area prefixes

- inter-area-router

Enable tracing of OSPF LSDB events for inter-area routers

- intra-area-prefix

Enable tracing of OSPF LSDB events for intra-area prefixes

**Configurable**

True

**Platforms**

Supported on all platforms

## misc

**Description**

Enable tracing all Config events.

**Context**

[network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace misc](#)

**Tree**

[misc](#)

**Configurable**

True

**Platforms**

Supported on all platforms

## packet

**Description**

Trace OSPF Packet types Only one type can be enabled at a time

**Context**

[network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace packet](#)

**Tree**

[packet](#)

**Configurable**

True

**Platforms**

Supported on all platforms

## detail

**Description**

To enable detailed tracing. Includes both received and sent packets.

**Context**

[network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace packet detail](#)

**Tree**

[detail](#)

**Configurable**

True

**Platforms**

Supported on all platforms

**modifier** *keyword*

<b>Description</b>	Enter the modifier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace packet modifier</a> <i>keyword</i>
<b>Tree</b>	<a href="#">modifier</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• ingress To enable tracing for the packets which are received.</li><li>• egress To enable tracing for the sent packets.</li><li>• in-and-egress To enable tracing for both sent and received packets</li><li>• drop To enable tracing for the sent packets.</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">trace-options trace packet type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• all Enable tracing of all OSPF packets</li><li>• hello Enable tracing of OSPF Hello packets</li><li>• dbdescr Enable tracing of OSPF database Descriptor packets</li><li>• ls-request Enable tracing of OSPF link-state request packets</li><li>• ls-update Enable tracing of OSPF link-state update packets</li><li>• ls-ack Enable tracing of OSPF link-state Ack packets</li></ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## routes

**Description** Enable the routes context

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace routes](#)

**Tree** [routes](#)

**Configurable** True

**Platforms** Supported on all platforms

## dest-address (*ipv4-address* | *ipv6-address*)

**Description** Enter the dest-address context

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace routes dest-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [dest-address](#)

**Configurable** True

**Platforms** Supported on all platforms

## spf

**Description** Enable the spf context

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace spf](#)

**Tree** [spf](#)

**Configurable** True

**Platforms** Supported on all platforms

## dest-address (*ipv4-address* | *ipv6-address*)

**Description** Enter the dest-address context

**Context** [network-instance name](#) *string* [protocols ospf instance name](#) *string* [trace-options trace spf dest-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [dest-address](#)

**Configurable** True

**Platforms** Supported on all platforms

**version** *identityref*

<b>Description</b>	The version that this ospf instance supports.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">version identityref</a>
<b>Tree</b>	<a href="#">version</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ospf-v2 Version 2 of the OSPF protocol</li> <li>ospf-v3 Version 3 of the OSPF protocol</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**pcep**

<b>Description</b>	Top-level configuration and operational state for Path Computation Element Protocol (PCEP)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep</a>
<b>Tree</b>	<a href="#">pcep</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pcc**

<b>Description</b>	Configure Path Computation Client (PCC) parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc</a>
<b>Tree</b>	<a href="#">pcc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>

<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **allow-negotiation** *boolean*

<b>Description</b>	Indicates whether the PCEP entity will permit negotiation of session parameters.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pcep pcc allow-negotiation</a> <i>boolean</i>
<b>Tree</b>	<a href="#">allow-negotiation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **capabilities** *keyword*

<b>Description</b>	The list of capabilities supported by this PCEP
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pcep pcc capabilities</a> <i>keyword</i>
<b>Tree</b>	<a href="#">capabilities</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• stateful-delegate</li> <li>• stateful-pce</li> <li>• stateful-optimize</li> <li>• segment-routing-path</li> <li>• rsvp-path</li> <li>• optical-gmpls</li> <li>• pce-initiated-lsp</li> <li>• stateless</li> <li>• p2mp</li> <li>• p2mp-delegate</li> <li>• p2mp-initiate</li> <li>• association</li> <li>• multipath</li> </ul>
<b>Configurable</b>	False

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	8

**connect-timer** *number*

<b>Description</b>	The time that the PCEP entity will wait to establish a TCP connection with a peer If a TCP connection is not established within this time, then PCEP aborts the session setup attempt.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc connect-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">connect-timer</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dead-timer** *number*

<b>Description</b>	Configure dead timer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc dead-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">dead-timer</a>
<b>Range</b>	1 to 255
<b>Default</b>	120
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**keep-wait-timer** *number*

<b>Description</b>	The time that the PCEP entity will wait to receive a Keepalive or PCErr message from a peer during session initialization after receiving an Open message If no Keepalive or PCErr message is received within this time, then PCEP terminates the TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc keep-wait-timer</a> <i>number</i>



<b>Tree</b>	<a href="#">keep-wait-timer</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **keepalive** *number*

<b>Description</b>	Configure keepalive
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc keepalive</a> <i>number</i>
<b>Tree</b>	<a href="#">keepalive</a>
<b>Range</b>	1 to 255
<b>Default</b>	30
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lsp-update** [pce-id](#) *number*

<b>Description</b>	List of Labeled Switch Path (LSP) update information sent by a PCE to a PCC to update attributes of a LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i>
<b>Tree</b>	<a href="#">lsp-update</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pce-id** *number*

<b>Description</b>	The unique identifier for PCE
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-detail** [association-index number](#)

<b>Description</b>	List of pce-associations attached to LSP path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i>
<b>Tree</b>	<a href="#">association-detail</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-index number**

<b>Description</b>	The unique identifier for association entries
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id number**

<b>Description</b>	Association-id for the associaiton group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <a href="#">association-id</a> <i>number</i>
<b>Tree</b>	<a href="#">association-id</a>
<b>Range</b>	0 to 65535
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-source** ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#))

<b>Description</b>	Associaiton Source for the association
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <a href="#">association-source</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> )
<b>Tree</b>	<a href="#">association-source</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### association-type *keyword*

<b>Description</b>	Associations types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <a href="#">association-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">association-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>diversity Diversity association</li> <li>policy Policy association</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### disjointness-reference *boolean*

<b>Description</b>	Refers to shortest path or not
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <a href="#">disjointness-reference</a> <i>boolean</i>
<b>Tree</b>	<a href="#">disjointness-reference</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### disjointness-type *keyword*

<b>Description</b>	Refers to strict or loose path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <a href="#">disjointness-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">disjointness-type</a>
<b>Default</b>	loose
<b>Options</b>	<ul style="list-style-type: none"> <li>strict</li> </ul>

	<ul style="list-style-type: none"> <li>• loose</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **diversity-type** *keyword*

<b>Description</b>	Refers to the choice of path node / link / srlg-node / srlg-link
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">association-detail association-index</a> <i>number</i> <b>diversity-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">diversity-type</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• link</li> <li>• node</li> <li>• srlg-link</li> <li>• srlg-node</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delegated** *boolean*

<b>Description</b>	Indicates whether the PCC is delegating the LSP to the PCE
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <b>delegated</b> <i>boolean</i>
<b>Tree</b>	<a href="#">delegated</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delegated-peer-address** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	The peer address to which the PCC has delegated the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <b>delegated-peer-address</b> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">delegated-peer-address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The destination address of the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id number destination-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **extended-tunnel-id** (*ipv4-address-unicast | ipv6-address-unicast*)

<b>Description</b>	The extended tunnel identifier
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id number extended-tunnel-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast</i> )
<b>Tree</b>	<a href="#">extended-tunnel-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lsp-id number**

<b>Description</b>	The unique identifier for the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id number lsp-id number</a>
<b>Tree</b>	<a href="#">lsp-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lsp-type keyword**

<b>Description</b>	The type of LSP
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">lsp-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">lsp-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">rsvp-p2p</a> Resource Reservation Protocol-Traffic Engineering (RSVP-TE) Point to Point</li> <li>• <a href="#">rsvp-p2mp</a> RSVP-TE Point to Multipoint</li> <li>• <a href="#">segment-routing</a> Segment Routing</li> <li>• <a href="#">pce-initiated-segment-routing</a> Segment Routing</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	The LSP path name that is unique in the PCC and remains constant throughout a path's life time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">name</a> <i>string</i>
<b>Tree</b>	<a href="#">name</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	The operational status of the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">down</a> LSP is not active</li> <li>• <a href="#">up</a> LSP has been signaled</li> </ul>

- active  
LSP is up and carrying traffic
- going-down  
LSP is being torn down, resources are being released
- going-up  
LSP is being signaled

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-detail** *path-type* *keyword*

<b>Description</b>	Path details.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">path-detail</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-type** *keyword*

<b>Description</b>	LSP paths types
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• current Current path</li> <li>• in-progress A path under process</li> <li>• pending Pending path which is yet to be processed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**error** *keyword*

<b>Description</b>	The reason for LSP update failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword error</i> <i>keyword</i>
<b>Tree</b>	<a href="#">error</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-applicable Not Applicable</li> <li>• unknown-reason Unknown reason</li> <li>• limit-reached-for-pce-lsps Limit reached for PCE-controlled LSPs</li> <li>• too-many-pending-lsp-updates Too many pending LSP update requests</li> <li>• unacceptable-parameters Unacceptable parameters</li> <li>• internal-error Internal error</li> <li>• lsp-admin-down LSP administratively brought down</li> <li>• lsp-preempted LSP preempted</li> <li>• rsvp-signaling-error RSVP signaling error</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**exclude-any** *number*

<b>Description</b>	Set of attribute filters associated with a tunnel, any of which renders a link unacceptable  It is the LSPA object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword exclude-any</i> <i>number</i>
<b>Tree</b>	<a href="#">exclude-any</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **explicit-route-objects** *route-object-index number*

**Description** Path EROs details.

**Context** [network-instance name](#) *string* [protocols pcep pcc lsp-update pce-id](#) *number* [path-detail path-type](#) *keyword* [explicit-route-objects route-object-index number](#)

**Tree** [explicit-route-objects](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **route-object-index** *number*

**Description** The unique identifier for RRO/ERO entries

**Context** [network-instance name](#) *string* [protocols pcep pcc lsp-update pce-id](#) *number* [path-detail path-type](#) *keyword* [explicit-route-objects route-object-index number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **as-number** *number*

**Description** AS-Number for a given segment in ERO or RRO

**Context** [network-instance name](#) *string* [protocols pcep pcc lsp-update pce-id](#) *number* [path-detail path-type](#) *keyword* [explicit-route-objects route-object-index number as-number](#) *number*

**Tree** [as-number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-interface-id** *number*

**Description** Local interface-id for a given unnumbered/link-local segment in ERO or RRO

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type keyword explicit-route-objects route-object-index</a> <i>number</i> <a href="#">local-interface-id</a> <i>number</i>
<b>Tree</b>	<a href="#">local-interface-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-interface-name *string*

<b>Description</b>	Local interface name for a given unnumbered/link-local segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type keyword explicit-route-objects route-object-index</a> <i>number</i> <a href="#">local-interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">local-interface-name</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-prefix (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Local IP address for a given segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type keyword explicit-route-objects route-object-index</a> <i>number</i> <a href="#">local-prefix</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">local-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	IP address for a given segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type keyword explicit-route-objects route-object-index</a> <i>number</i> <a href="#">prefix</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">prefix</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-interface-id *number*

<b>Description</b>	Remote interface-id for a given unnumbered/link-local segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc</a> <a href="#">lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">explicit-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">remote-interface-id</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-interface-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-prefix (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Remote IP address for a given segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc</a> <a href="#">lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">explicit-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">remote-prefix</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">remote-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### router-id (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Router-id for a given unnumbered segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc</a> <a href="#">lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">explicit-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">router-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-label** *number*

<b>Description</b>	Unique Segment Identifier label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">explicit-route-objects route-object-index</a> <i>number</i> <a href="#">sid-label</a> <i>number</i>
<b>Tree</b>	<a href="#">sid-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-type** *keyword*

<b>Description</b>	Refers to strict or loose hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">explicit-route-objects route-object-index</a> <i>number</i> <a href="#">sid-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">sid-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• strict</li> <li>• loose</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**holding-priority** *number*

<b>Description</b>	The priority of the TE LSP with respect to holding resources The value of 0 represents highest priority. The holding priority indicates whether this session can be preempted by another session. It is the LSPA object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">holding-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">holding-priority</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop-count *number*

<b>Description</b>	The number of hops that are traversed via the TE tunnel It is the METRIC object in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">hop-count</a> <i>number</i>
<b>Tree</b>	<a href="#">hop-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### igp-metric *number*

<b>Description</b>	The Interior Gateway Protocol (IGP) metric that must be optimized by the path computation algorithm for providing the cost of computed path It is the METRIC object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">igp-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">igp-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### include-all *number*

<b>Description</b>	Set of attribute filters associated with a tunnel, all of which must be present for a link to be acceptable It is the LSPA object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">include-all</a> <i>number</i>
<b>Tree</b>	<a href="#">include-all</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**include-any** *number*

<b>Description</b>	Set of attribute filters associated with a tunne, any of which renders a link acceptable It is the LSPA object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">include-any</a> <i>number</i>
<b>Tree</b>	<a href="#">include-any</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsp-bandwidth** *number*

<b>Description</b>	The bandwidth that is being requested by the LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">lsp-bandwidth</a> <i>number</i>
<b>Tree</b>	<a href="#">lsp-bandwidth</a>
<b>Units</b>	Mbps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**record-route-objects** [route-object-index](#) *number*

<b>Description</b>	Path RROs details.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects</a> <a href="#">route-object-index</a> <i>number</i>
<b>Tree</b>	<a href="#">record-route-objects</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-object-index** *number*

<b>Description</b>	The unique identifier for RRO/ERO entries
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects route-object-index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**as-number** *number*

<b>Description</b>	AS-Number for a given segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects route-object-index</a> <i>number</i> <a href="#">as-number</a> <i>number</i>
<b>Tree</b>	<a href="#">as-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-interface-id** *number*

<b>Description</b>	Local interface-id for a given unnumbered/link-local segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects route-object-index</a> <i>number</i> <a href="#">local-interface-id</a> <i>number</i>
<b>Tree</b>	<a href="#">local-interface-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-interface-name** *string*

<b>Description</b>	Local interface name for a given unnumbered/link-local segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects route-object-index</a> <i>number</i> <a href="#">local-interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">local-interface-name</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-prefix** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

**Description** Local IP address for a given segment in ERO or RRO

**Context** [network-instance name](#) *string* [protocols](#) [pcep](#) [pcc](#) [lsp-update](#) [pce-id](#) *number* [path-detail](#) [path-type](#) *keyword* [record-route-objects](#) [route-object-index](#) *number* **local-prefix** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

**Tree** [local-prefix](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

**Description** IP address for a given segment in ERO or RRO

**Context** [network-instance name](#) *string* [protocols](#) [pcep](#) [pcc](#) [lsp-update](#) [pce-id](#) *number* [path-detail](#) [path-type](#) *keyword* [record-route-objects](#) [route-object-index](#) *number* **prefix** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

**Tree** [prefix](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **remote-interface-id** *number*

**Description** Remote interface-id for a given unnumbered/link-local segment in ERO or RRO

**Context** [network-instance name](#) *string* [protocols](#) [pcep](#) [pcc](#) [lsp-update](#) [pce-id](#) *number* [path-detail](#) [path-type](#) *keyword* [record-route-objects](#) [route-object-index](#) *number* **remote-interface-id** *number*

**Tree** [remote-interface-id](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**remote-prefix** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Remote IP address for a given segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">lsp-update</a> <a href="#">pce-id</a> <i>number</i> <a href="#">path-detail</a> <a href="#">path-type</a> <i>keyword</i> <a href="#">record-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">remote-prefix</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">remote-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**router-id** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Router-id for a given unnumbered segment in ERO or RRO
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">lsp-update</a> <a href="#">pce-id</a> <i>number</i> <a href="#">path-detail</a> <a href="#">path-type</a> <i>keyword</i> <a href="#">record-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">router-id</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-label** *number*

<b>Description</b>	Unique Segment Identifier label value
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">lsp-update</a> <a href="#">pce-id</a> <i>number</i> <a href="#">path-detail</a> <a href="#">path-type</a> <i>keyword</i> <a href="#">record-route-objects</a> <a href="#">route-object-index</a> <i>number</i> <a href="#">sid-label</a> <i>number</i>
<b>Tree</b>	<a href="#">sid-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-type** *keyword*

<b>Description</b>	Refers to strict or loose hop
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">record-route-objects route-object-index</a> <i>number</i> <a href="#">sid-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">sid-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict</li> <li>loose</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**setup-priority** *number*

<b>Description</b>	The priority of the TE LSP with respect to holding resources The value of 0 represents highest priority. The holding priority indicates whether this session can be in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">setup-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srp-id** *number*

<b>Description</b>	Stateful PCE Request Parameters(SRP) identifier for update sent by PCE
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">srp-id</a> <i>number</i>
<b>Tree</b>	<a href="#">srp-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-metric** *number*

<b>Description</b>	The Traffic Engineering (TE) metric that must be optimized by the path computation algorithm for providing the cost of computed path It is the METRIC object used in PCReq messages.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">path-detail path-type</a> <i>keyword</i> <a href="#">te-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The sender address of the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">source-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **state** *keyword*

<b>Description</b>	The state of the LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-applicable</li> <li>• mbb-in-progress MBB procedure is in progress</li> <li>• mbb-fail MBB procedure failed</li> <li>• mbb-success MBB procedure succeeded</li> <li>• update-delegation Delegation update is being processed</li> <li>• lsp-down LSP down update is being processed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-id** *number*

<b>Description</b>	The unique tunnel identifier that remains constant over the life time of a tunnel
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc lsp-update pce-id</a> <i>number</i> <a href="#">tunnel-id</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel-id</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-sessions** *number*

<b>Description</b>	The maximum number of sessions involving this PCEP entity that can exist at any time.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc max-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">max-sessions</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-unknown-requests** *number*

<b>Description</b>	The maximum number of unrecognized requests and replies that any session on this PCEP entity is willing to accept per minute before terminating the session.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc max-unknown-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">max-unknown-requests</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**open-wait-timer** *number*

<b>Description</b>	The time that the PCEP entity will wait to receive an Open message from a peer after the TCP connection has come up
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If no Open message is received within this time, then PCEP terminates the TCP connection.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc open-wait-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">open-wait-timer</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Indicates the operational status of this PCEP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up The PCEP entity is active</li> <li>• down The PCEP entity is inactive</li> <li>• going-up The PCEP entity is activating</li> <li>• going-down The PCEP entity is deactivating</li> <li>• failed The PCEP entity has failed and will recover when possible</li> <li>• failed-permanently The PCEP entity has failed and will not recover without operator intervention</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-request** [request-id](#) *number*

<b>Description</b>	List of Path Computation Request (PCReq) messages sent by the PCC to request a path computation.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a>
<b>Tree</b>	<a href="#">path-request</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-id** *number*

<b>Description</b>	The unique path computation request identifier represented in PCReq message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bidirectional** *boolean*

<b>Description</b>	Indicates whether the PCReq message relates to a bi-directional TE LSP that has the same traffic engineering requirements in each direction  It is the RP object used in PCReq message. TE requirements include fate sharing, protection and restoration, LSRs, TE links, and resource requirements (e.g., latency and jitter)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">bidirectional</a> <i>boolean</i>
<b>Tree</b>	<a href="#">bidirectional</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The destination address of the path for which the path computation is requested  It is the END-POINTS object used in PCReq message.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number destination-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**exclude-any** *number*

<b>Description</b>	Set of attribute filters associated with a tunnel, any of which renders a link unacceptable  It is the LSPA object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number exclude-any</a> <i>number</i>
<b>Tree</b>	<a href="#">exclude-any</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**extended-profiles** *number*

<b>Description</b>	List of extended identifiers associated with the path profile identifier.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number extended-profiles</a> <i>number</i>
<b>Tree</b>	<a href="#">extended-profiles</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**extended-tunnel-id** (*ipv4-address-unicast | ipv6-address-unicast*)

<b>Description</b>	The extended tunnel identifier
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number extended-tunnel-id</a> ( <i>ipv4-address-unicast   ipv6-address-unicast</i> )
<b>Tree</b>	<a href="#">extended-tunnel-id</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### holding-priority *number*

**Description** The priority of the TE LSP with respect to holding resources  
The value of 0 represents highest priority. The holding priority indicates whether this session can be preempted by another session. It is the LSPA object used in PCReq message.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [holding-priority number](#)

**Tree** [holding-priority](#)

**Range** 0 to 7

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop-count *number*

**Description** The number of hops that are traversed via the TE tunnel  
It is the METRIC object in PCReq message.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [hop-count number](#)

**Tree** [hop-count](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### igp-metric *number*

**Description** The Interior Gateway Protocol (IGP) metric that must be optimized by the path computation algorithm for providing the cost of computed path  
It is the METRIC object used in PCReq message.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [igp-metric number](#)

**Tree** [igp-metric](#)

**Configurable** False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **include-all** *number*

**Description** Set of attribute filters associated with a tunnel, all of which must be present for a link to be acceptable  
It is the LSPA object used in PCReq message.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [include-all number](#)

**Tree** [include-all](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **include-any** *number*

**Description** Set of attribute filters associated with a tunnel, any of which renders a link acceptable  
It is the LSPA object used in PCReq message.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [include-any number](#)

**Tree** [include-any](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-protection-desired** *boolean*

**Description** Indicates whether local protection is desired or not  
It is the LSPA (LSP Attribute) object used in PCReq message. When the value of this object is set to 'true', it indicates that the computed path must include links protected with Fast Reroute as defined in the maximum number of hops to be transversed that must not be exceeded to consider computed path as acceptable.

**Context** [network-instance name](#) *string* [protocols pcep pcc path-request request-id number](#) [local-protection-desired boolean](#)

**Tree** [local-protection-desired](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### loose-path-acceptable *boolean*

**Description** Indicates whether a loose path is acceptable (true) or not (false)  
It is the RP object used in PCReq message.  
When the value of this object is set to 'true', it indicates that a loose path is acceptable. When the value of this object is set to 'false', it indicates that a path exclusively made of strict hops is required.

**Context** [network-instance name string protocols pcep pcc path-request request-id number loose-path-acceptable boolean](#)

**Tree** [loose-path-acceptable](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsp-bandwidth *number*

**Description** The bandwidth that is being requested by the LSP.

**Context** [network-instance name string protocols pcep pcc path-request request-id number lsp-bandwidth number](#)

**Tree** [lsp-bandwidth](#)

**Units** Mbps

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lsp-id *number*

**Description** The unique identifier for the LSP

**Context** [network-instance name string protocols pcep pcc path-request request-id number lsp-id number](#)

**Tree** [lsp-id](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Isp-name** *string*

<b>Description</b>	The LSP path name that is unique in the PCC and remains constant throughout a path's life time.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">lsp-name</a> <i>string</i>
<b>Tree</b>	<a href="#">lsp-name</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Isp-type** *keyword*

<b>Description</b>	The type of LSP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">lsp-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">lsp-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• rsvp-p2p Resource Reservation Protocol-Traffic Engineering (RSVP-TE) Point to Point</li> <li>• rsvp-p2mp RSVP-TE Point to Multipoint</li> <li>• segment-routing Segment Routing</li> <li>• pce-initiated-segment-routing Segment Routing</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-lsr-labels** *number*

<b>Description</b>	The maximum segment routing label stack size for this LSP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">max-lsr-labels</a> <i>number</i>
<b>Tree</b>	<a href="#">max-lsr-labels</a>

<b>Range</b>	1 to 10
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **message-state** *keyword*

<b>Description</b>	The state of the PCReq message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">message-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">message-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown The state of PCReq message is unknown</li> <li>• request-parameter Request Parameter (RP) object is included in the PCReq message</li> <li>• sent-for-compute PCReq message has been sent for path computation</li> <li>• error-received Path Computation Error (PCErr) message is received by the PCC</li> <li>• notify-received Path Computation Notification (PCNtf) message is received by the PCC</li> <li>• cancel PCReq message has been cancelled</li> <li>• compute-received Path computation is received by the PCC</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric-bound** *keyword*

<b>Description</b>	Indicates whether the metric-value specifies a bound (a maximum)for the path metric that must not be exceeded for the PCC to consider the computed path as acceptable  It is the METRIC object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">metric-bound</a> <i>keyword</i>

<b>Tree</b>	<a href="#">metric-bound</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">igp-metric</a></li> <li>• <a href="#">te-metric</a></li> <li>• <a href="#">hop-count</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	3

### **metric-compute** *keyword*

<b>Description</b>	Indicates whether PCE must provide the computed path metric value in Path Computation Response (PCRep) message for the corresponding metric It is the METRIC object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">metric-compute</a> <i>keyword</i>
<b>Tree</b>	<a href="#">metric-compute</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">igp-metric</a></li> <li>• <a href="#">te-metric</a></li> <li>• <a href="#">hop-count</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	3

### **msg-priority** *number*

<b>Description</b>	The priority of the PCReq message It is RP object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">msg-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">msg-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**profiles** *number*

<b>Description</b>	List of path profile identifiers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number profiles</a> <i>number</i>
<b>Tree</b>	<a href="#">profiles</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**reoptimization** *boolean*

<b>Description</b>	Indicates whether the PCReq message relates to the reoptimization of an existing TE LSP It is the RP object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number reoptimization</a> <i>boolean</i>
<b>Tree</b>	<a href="#">reoptimization</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**setup-priority** *number*

<b>Description</b>	The priority of the TE LSP with respect to holding resources The value of 0 represents highest priority. The holding priority indicates whether this session can be in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number setup-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The source address of the path for which path computation is requested It is the END-POINTS object used in PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">source-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-vector-id** *number*

<b>Description</b>	The Synchronization Vector (svec) identifier for Synchronized Dependent Path Computations
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">sync-vector-id number</a>
<b>Tree</b>	<a href="#">sync-vector-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-metric** *number*

<b>Description</b>	The Traffic Engineering (TE) metric that must be optimized by the path computation algorithm for providing the cost of computed path It is the METRIC object used in PCReq messages.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number</a> <a href="#">te-metric number</a>
<b>Tree</b>	<a href="#">te-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tunnel-id** *number*

<b>Description</b>	The unique tunnel identifier that remains constant over the life time of a tunnel.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc path-request request-id number tunnel-id</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer** [ip-address](#) (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	Configure peer parameters for PCC
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

### **ip-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The address of the PCE peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administrative state of PCC peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### capabilities *keyword*

**Description** The capabilities supported by this peer

**Context** [network-instance name](#) *string* [protocols](#) [pcep](#) [pcc](#) [peer](#) [ip-address](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [capabilities](#) *keyword*

**Tree** [capabilities](#)

**Options**

- stateful-delegate
- stateful-pce
- stateful-optimize
- segment-routing-path
- rsvp-path
- optical-gmpls
- pce-initiated-lsp
- stateless
- p2mp
- p2mp-delegate
- p2mp-initiate
- association
- multipath

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 8

### is-overloaded *boolean*

**Description** The value indicates whether this peer is overloaded with the processing of existing requests and is unable to handle new requests leading to unacceptable response times

**Context** [network-instance name](#) *string* [protocols](#) [pcep](#) [pcc](#) [peer](#) [ip-address](#) (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*) [is-overloaded](#) *boolean*

**Tree** [is-overloaded](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	Configure local IP to be used for PCE peering
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">local-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">local-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** *reference*

<b>Description</b>	Reference to a configured network-instance used for reachability to PCE This network-instance must already exist in the system.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-dead-timer** *number*

<b>Description</b>	The operational value of dead timer interval in use by this peer This is the time after which a peer should declare a session down if it does not receive any PCEP messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">oper-dead-timer number</a>
<b>Tree</b>	<a href="#">oper-dead-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-keepalive** *number*

<b>Description</b>	The operational value of keepalive interval in use by this entity's peer This is the maximum time between two consecutive messages sent to a peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">oper-keepalive number</a>
<b>Tree</b>	<a href="#">oper-keepalive</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-local-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	The value indicates the internet address being used by this PCEP Peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">oper-local-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">oper-local-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Details the operational state of the Pcep Pcc Peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> </ul>

- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**preference number****Description**

The preference value of this peer

If a higher preference PCE is unavailable or not connected, the PCE with the next preference is used.

**Context**[network-instance name](#) [string](#) [protocols](#) [pcep](#) [pcc](#) [peer](#) [ip-address](#) ([ipv4-address-unicast](#) | [ipv6-address-unicast-without-local](#)) [preference number](#)**Tree**[preference](#)**Range**

0 to 100

**Default**

0

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-established-time *string*

<b>Description</b>	Indicates when the session with this peer entered into the established state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">session-established-time</a> <i>string</i>
<b>Tree</b>	<a href="#">session-established-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### speaker-id *string*

<b>Description</b>	A unique speaker identifier for the peer that does change during lifetime of the speaker
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">speaker-id</a> <i>string</i>
<b>Tree</b>	<a href="#">speaker-id</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Holds statistics of messages send to peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-keepalive-rcvd *number*

<b>Description</b>	The number of Keepalive messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-keepalive-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-keepalive-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-keepalive-sent *number*

<b>Description</b>	The number of Keepalive messages sent to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-keepalive-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-keepalive-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcerr-rcvd *number*

<b>Description</b>	The number of PCERR messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcerr-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcerr-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcerr-sent *number*

<b>Description</b>	The number of PCErr messages sent to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">statistics num-pcerr-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcerr-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcinit-rcvd *number*

<b>Description</b>	The number of PC initiated messages received from this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">statistics num-pcinit-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcinit-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcinit-sent *number*

<b>Description</b>	The number of PC initiated messages sent to this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">statistics num-pcinit-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcinit-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcntf-rcvd *number*

<b>Description</b>	The number of PCNtf messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcntf-rcvd number</a>
<b>Tree</b>	<a href="#">num-pcntf-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcntf-sent *number*

<b>Description</b>	The number of PCNtf messages sent to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcntf-sent number</a>
<b>Tree</b>	<a href="#">num-pcntf-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcrep-rcvd *number*

<b>Description</b>	The number of PCRep messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcrep-rcvd number</a>
<b>Tree</b>	<a href="#">num-pcrep-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**num-pcrep-sent** *number*

<b>Description</b>	The number of PCRep messages sent to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcrep-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcrep-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-pcreq-rcvd** *number*

<b>Description</b>	The number of PCReq messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcreq-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcreq-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-pcreq-sent** *number*

<b>Description</b>	The number of PCReq messages sent to this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcreq-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcreq-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcrpt-rcvd *number*

<b>Description</b>	The number of PCRpt messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcrpt-rcvd number</a>
<b>Tree</b>	<a href="#">num-pcrpt-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcrpt-sent *number*

<b>Description</b>	The number of PCRpt messages sent to this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcrpt-sent number</a>
<b>Tree</b>	<a href="#">num-pcrpt-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-pcupd-rcvd *number*

<b>Description</b>	The number of PCUpd messages received from this peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcupd-rcvd number</a>
<b>Tree</b>	<a href="#">num-pcupd-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-pcupd-sent** *number*

<b>Description</b>	The number of PCUpd messages sent to this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-pcupd-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-pcupd-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-req-rcvd** *number*

<b>Description</b>	The number of requests received from this peer A request corresponds 1:1 with an RP object in a PCReq message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-req-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-req-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-req-sent** *number*

<b>Description</b>	The number of requests sent to this peer A request corresponds 1:1 with an RP object in a PCReq message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address (ipv4-address-unicast   ipv6-address-unicast-without-local)</a> <a href="#">statistics num-req-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-req-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-rpt-rcvd** *number*

<b>Description</b>	The number of report messages received from this peer This might be greater than num-pcrpt-rcvd because multiple requests can be batched into a single PCRpt message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">peer</a> <a href="#">ip-address</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">statistics</a> <a href="#">num-rpt-rcvd</a> <i>number</i>
<b>Tree</b>	<a href="#">num-rpt-rcvd</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-rpt-sent** *number*

<b>Description</b>	The number of report messages sent to this peer This might be greater than num-pcrpt-sent because multiple requests can be batched into a single PCRpt messages.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">peer</a> <a href="#">ip-address</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">statistics</a> <a href="#">num-rpt-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">num-rpt-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**num-session-setup-fail** *number*

<b>Description</b>	The number of PCEP sessions with the peer that have been attempted but failed before being fully established This counter is incremented each time a session retry to this peer fails
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">peer</a> <a href="#">ip-address</a> ( <a href="#">ipv4-address-unicast</a>   <a href="#">ipv6-address-unicast-without-local</a> ) <a href="#">statistics</a> <a href="#">num-session-setup-fail</a> <i>number</i>
<b>Tree</b>	<a href="#">num-session-setup-fail</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### num-session-setup-ok *number*

<b>Description</b>	The number of PCEP sessions successfully established with the peer, including any current session  This counter is incremented each time a session with this peer is successfully established
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">statistics num-session-setup-ok</a> <i>number</i>
<b>Tree</b>	<a href="#">num-session-setup-ok</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sync-state *keyword*

<b>Description</b>	The synchronization state of this peer.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc peer ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> ) <a href="#">sync-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">sync-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>not-initialized Indicates the State Synchronization has not yet started or not initialized due to no connection with the peer.</li> <li>in-progress Indicates the State Synchronization is in progress</li> <li>done Indicates the State Synchronozation has been completed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**redelegation-timer** *number*

<b>Description</b>	Configure redelegation-timer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc redelegation-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">redelegation-timer</a>
<b>Range</b>	1 to 3600
<b>Default</b>	90
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**report-path-constraints** *boolean*

<b>Description</b>	Specify whether to enable/disable path constraints in PCC report
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc report-path-constraints</a> <i>boolean</i>
<b>Tree</b>	<a href="#">report-path-constraints</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-timer** *number*

<b>Description</b>	The maximum time that the PCEP entity will wait for a response to a PCReq message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc request-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">request-timer</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state-timer**

<b>Description</b>	Holds state timer information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc state-timer</a>
<b>Tree</b>	<a href="#">state-timer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timer number**

<b>Description</b>	Configure state-timer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc state-timer timer number</a>
<b>Tree</b>	<a href="#">timer</a>
<b>Range</b>	1 to 3600
<b>Default</b>	180
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timer-action keyword**

<b>Description</b>	State timer action remove/none
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc state-timer timer-action keyword</a>
<b>Tree</b>	<a href="#">timer-action</a>
<b>Default</b>	remove
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• remove</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-timer** *number*

<b>Description</b>	The value is used in the case of a synchronized path computation request using the SVEC object.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc sync-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">sync-timer</a>
<b>Range</b>	1 to 65535
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unknown-message-rate** *number*

<b>Description</b>	Configure unknown message rate
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pcep pcc unknown-message-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-message-rate</a>
<b>Range</b>	1 to 255
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pim**

<b>Description</b>	Enable the pim context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a>
<b>Tree</b>	<a href="#">pim</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable PIM
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim admin-state</a> <i>keyword</i>



<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## database

<b>Description</b>	Database of PIM (S,G) (*,G), (*,*,RP)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database</a>
<b>Tree</b>	<a href="#">database</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group [group](#) (*ipv4-address* | *ipv6-address*) [source](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Enter the group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**advertising-router** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Router address that advertised the route to the source
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">advertising-router</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">advertising-router</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-forwarding-rate** *number*

<b>Description</b>	Current forwarding rate for the entry in bps Current forwarding rate being used by a source group(S,G) entry or (*,G) entry for the traffic in bits per second (bps), where * means any source entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">current-forwarding-rate</a> <i>number</i>
<b>Tree</b>	<a href="#">current-forwarding-rate</a>
<b>Default</b>	0
<b>Units</b>	bps
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**immediate-outgoing-interface-count** *number*

<b>Description</b>	Number of interfaces in the immediate outgoing interface list
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An outgoing list can be 'immediate' if it is built directly from the state of the relevant type as indicated by 'source-type'.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">immediate-outgoing-interface-count</a> <i>number</i>
<b>Tree</b>	<a href="#">immediate-outgoing-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inherited-outgoing-interface-count** *number*

<b>Description</b>	Number of interfaces in the inherited outgoing interface list An 'inherited' list inherits state from other types.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">inherited-outgoing-interface-count</a> <i>number</i>
<b>Tree</b>	<a href="#">inherited-outgoing-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inherited-rpt-outgoing-interface-count** *number*

<b>Description</b>	Number of interfaces in the inherited outgoing interface list for (S,G,Rpt)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">inherited-rpt-outgoing-interface-count</a> <i>number</i>
<b>Tree</b>	<a href="#">inherited-rpt-outgoing-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **join-or-prune-interface-count** *number*

<b>Description</b>	Number of interfaces on which the router received a Join or Prune message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">join-or-prune-interface-count</a> <i>number</i>

<b>Tree</b>	<a href="#">join-or-prune-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### keepalive-timer *number*

<b>Description</b>	Keepalive timer for (S,G) It is applicable only for (S,G) entries. The (S,G) keepalive timer is updated by data being forwarded using this (S,G) forwarding state. It is used to keep (S,G) state alive in the absence of explicit (S,G) Joins.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">keepalive-timer number</a>
<b>Tree</b>	<a href="#">keepalive-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-rx-exclude-interface-count *number*

<b>Description</b>	Number of interfaces in the local membership exclude interface list Local membership is the result of the local membership mechanism (MLD) running on the interface. Exclude list contains interfaces which are not interested in receiving multicast traffic for this source group entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-rx-exclude-interface-count number</a>
<b>Tree</b>	<a href="#">local-rx-exclude-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-rx-include-interface-count *number*

<b>Description</b>	Number of interfaces in the local membership include interface list
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Local membership is the result of the local membership mechanism (MLD) running on a interface. Include list contains interfaces which are interested in receiving multicast traffic for this source group entry.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">local-rx-include-interface-count</a> <i>number</i>
<b>Tree</b>	<a href="#">local-rx-include-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lost-assert-interface-count** *number*

<b>Description</b>	Number of interfaces on which the router lost assert
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">lost-assert-interface-count</a> <i>number</i>
<b>Tree</b>	<a href="#">lost-assert-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-rib-nh-address** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	Next hop address towards the RP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">multicast-rib-nh-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
<b>Tree</b>	<a href="#">multicast-rib-nh-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-rib-source-flags** *bits*

<b>Description</b>	Multicast RIB (mrib) information about the source  If the entry is of type 'star-g' or 'star-star-rp', it will contain information about the RP for this group.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">multicast-rib-source-flags</a> <i>bits</i>
<b>Tree</b>	<a href="#">multicast-rib-source-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **outgoing-interface** *name string*

<b>Description</b>	List of the PIM enabled interfaces for the Multicast entry <S,G>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">outgoing-interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">outgoing-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	Router interface name
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">outgoing-interface name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **flags** *bits*

<b>Description</b>	Set of lists to which this interface belongs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">outgoing-interface name</a> <i>string</i> <a href="#">flags</a> <i>bits</i>
<b>Tree</b>	<a href="#">flags</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-from-anycast-rp *boolean*

**Description** Register message received from anycast RP  
Whether a register message for this source group combination was received from the anycast RP and not from the Designated Router (DR) connected to the source. It is not applicable when the value of source-type is 'star-star-rp' or 'star-g'.

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address | ipv6-address*) [source](#) (*ipv4-address | ipv6-address*) [register-from-anycast-rp](#) *boolean*

**Tree** [register-from-anycast-rp](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-state *keyword*

**Description** Register state kept at the source DR  
When the host starts sending multicast packets and if there are no entries programmed for that group, the source DR sends a Register packet to the RP(G). Register state transition happen based on the register stop timer and the response received from the RP.

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address | ipv6-address*) [source](#) (*ipv4-address | ipv6-address*) [register-state](#) *keyword*

**Tree** [register-state](#)

**Options**

- no-info
- join
- join-pending
- prune
- null-join

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-stop-timer** *number*

<b>Description</b>	Time remaining before the register-state might transition to a different state This timer has a non-zero value when the value of register-state is not 'no-info'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">register-stop-timer number</a>
<b>Tree</b>	<a href="#">register-stop-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**resolved-by** *keyword*

<b>Description</b>	Routing table used to resolve this entry The value of this object will be 'multicast-route-table' if the source or Rendezvous Point (RP) is resolved by the multicast route table. The value of this object will be 'unicast-route-table' if the source or Rendezvous Point (RP) is resolved by the unicast route table. The value will be 'none' if the source or RP is unresolved.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">resolved-by keyword</a>
<b>Tree</b>	<a href="#">resolved-by</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• multicast-route-table</li> <li>• unicast-route-table</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rp-address** (*ipv4-address | ipv6-address*)

<b>Description</b>	IP address of the Rendezvous Point (RP)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">rp-address</a> ( <i>ipv4-address   ipv6-address</i> )



<b>Tree</b>	<a href="#">rp-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rpf-neighbor-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the Reverse Path Forwarding (RPF) neighbor
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">rpf-neighbor-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">rpf-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rpf-neighbor-interface-name** *string*

<b>Description</b>	Router interface on which the RPF neighbor exists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">rpf-neighbor-interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">rpf-neighbor-interface-name</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rpt-rpf-neighbor-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The address of the RPF neighbor on the RPT
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">rpt-rpf-neighbor-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">rpt-rpf-neighbor-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**s-g-rpt-prune-interface-count** *number*

<b>Description</b>	Number of interfaces on which the router received (S,G,Rpt) prunes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <b>s-g-rpt-prune-interface-count</b> <i>number</i>
<b>Tree</b>	<a href="#">s-g-rpt-prune-interface-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sg-state** *keyword*

<b>Description</b>	Current state of the (S,G)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <b>sg-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">sg-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• active</li> <li>• standby</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-flags** *bits*

<b>Description</b>	<p>spt-bit and PruneDesired state of the entry</p> <p>This object is applicable only for (S,G) entries,i.e., when source-type is 'sg'. The (S,G) 'spt-bit' is used to distinguish whether to forward on (*,*,RP) or (*,G) or on (S,G) state. It is updated when the (S,G) data comes on the RPF interface towards the source. 'rpt-prune-desired' is set according to the PruneDesired(S,G,rpt) algorithm.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <b>source-flags</b> <i>bits</i>
<b>Tree</b>	<a href="#">source-flags</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-type *keyword*

**Description** Type of this entry

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address | ipv6-address*) [source](#) (*ipv4-address | ipv6-address*) [source-type keyword](#)

**Tree** [source-type](#)

**Options**

- star-star-rp
- star-g
- sg

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### spt-switchover-threshold *number*

**Description** Configured threshold in kilobits per second(kbps) for the group to which this (S,G) belongs

For a group G configured with a threshold, switchover to SPT for an (S,G) is attempted only if the (S,G)'s rate exceeds this configured threshold.

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address | ipv6-address*) [source](#) (*ipv4-address | ipv6-address*) [spt-switchover-threshold number](#)

**Tree** [spt-switchover-threshold](#)

**Units** kbps

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

**Description** Forwarding statistics for the database entry

These statistics are collected by the forwarding engine.

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address | ipv6-address*) [source](#) (*ipv4-address | ipv6-address*) [statistics](#)

<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discarded-packets *number*

<b>Description</b>	Number of multicast packets that matched this entry but were discarded For (S,G) entries, if the traffic is getting forwarded on the SPT, the packets arriving from the RPT will be discarded.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">statistics discarded-packets</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarded-octets *number*

<b>Description</b>	Number of multicast octets that were forwarded to the interfaces in the outgoing interface list
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">statistics forwarded-octets</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">forwarded-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarded-packets *number*

<b>Description</b>	Number of multicast packets that were forwarded to the interfaces in the outgoing interface list
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">statistics forwarded-packets</a> <a href="#">number</a>

<b>Tree</b>	<a href="#">forwarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rpf-mismatches** *number*

<b>Description</b>	Number of multicast packets that matched this entry but did not arrive on the 'rpf-neighbor-interface-name' interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">statistics rpf-mismatches</a> <i>number</i>
<b>Tree</b>	<a href="#">rpf-mismatches</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-time** *string*

<b>Description</b>	Time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **upstream-jp-state** *keyword*

<b>Description</b>	Upstream Join-Prune state  This is a result of sending PIM Join-Prune messages towards the source or the RP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">upstream-jp-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">upstream-jp-state</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• not-joined</li> <li>• joined</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### upstream-jp-timer *number*

<b>Description</b>	Time remaining before the router sends another Join message to its upstream neighbor
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">upstream-jp-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">upstream-jp-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### upstream-rpt-jp-state *keyword*

<b>Description</b>	Upstream RPT Join-Prune state (S,G,rpt) Joins and Prunes are (S,G) Joins or Prunes sent on the RP tree with the RPT bit set. To either modify the results of (*,G) Joins, or to override the behavior of other upstream LAN peers.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim database group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">upstream-rpt-jp-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">upstream-rpt-jp-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-joined-star-g</li> <li>• not-pruned</li> <li>• pruned</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**upstream-rpt-override-timer** *number*

<b>Description</b>	Delay to triggered Join(S,G,rpt) messages to prevent implosions of triggered messages  If non-zero, it means that the router was in 'not-pruned' state and it saw a Prune(S,G,rpt) message being sent to RPF'(S,G,rpt). If the router sees a Join(S,G,rpt) override message being sent by some other router on the LAN while the timer is still non-zero, it simply cancels the override timer. If it does not see a Join(S,G,rpt) message, then on expiry of the override timer, it sends it's own Join(S,G,rpt) message to RPF'(S,G,rpt). A similar scenario exists when RPF'(S,G,rpt) changes to become equal to RPF'(*,G).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">upstream-rpt-override-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">upstream-rpt-override-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ecmp-balance** *boolean*

<b>Description</b>	Enables hashing balance for multicast streams  This command enables multicast balancing of traffic over ECMP links based on the number of (S, G) distributed over each link. When enabled, each new multicast stream that needs to be forwarded over an ECMP link is compared to the count of (S, G) already using each link, so that the link with the fewest (S, G) is chosen.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ecmp-balance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ecmp-balance</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ecmp-balance-hold** *number*

<b>Description</b>	Hold period for ecmp balancing  This command defines a hold period that applies after an interface has been added to the ECMP link. It is also used periodically to rebalance if channels have been removed from the ECMP link. If the ECMP interface has not
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changed in the hold period and if no multicast streams have been removed, then no action is taken when the timer triggers. This parameter should be used to avoid excessive changes to the multicast distribution.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ecmp-balance-hold</a> <i>number</i>
<b>Tree</b>	<a href="#">ecmp-balance-hold</a>
<b>Range</b>	1 to 600
<b>Default</b>	1
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ecmp-hashing

<b>Description</b>	Enables hashing for multicast streams  This command enables hash-based multicast balancing of traffic over ECMP links and causes PIM joins to be distributed over the multiple ECMP paths based on a hash of S and G (and possibly next-hop IP address). When a link in the ECMP set is removed, the multicast flows that were using that link are redistributed over the remaining ECMP links using the same hash algorithm. When a link is added to the ECMP set new joins may be allocated to the new link based on the hash algorithm, but existing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ecmp-hashing</a>
<b>Tree</b>	<a href="#">ecmp-hashing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rebalance *boolean*

<b>Description</b>	Enables rebalance for ecmp hashing
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ecmp-hashing rebalance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">rebalance</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## import-policies

<b>Description</b>	Import policies.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim import-policies</a>
<b>Tree</b>	<a href="#">import-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## join-policy *reference*

<b>Description</b>	Policies that apply to the Join message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim import-policies join-policy reference</a>
<b>Tree</b>	<a href="#">join-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

## register-policy *reference*

<b>Description</b>	Policies that apply to the register message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim import-policies register-policy reference</a>
<b>Tree</b>	<a href="#">register-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**interface** *interface-name string*

<b>Description</b>	List of PIM interfaces
<b>Context</b>	<a href="#">network-instance name string protocols pim interface interface-name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string protocols pim interface interface-name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the PIM protocol for this interface
<b>Context</b>	<a href="#">network-instance name string protocols pim interface interface-name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-interval** *number*

<b>Description</b>	Interval at which the router sends PIM assert messages
<b>Context</b>	<a href="#">network-instance name string protocols pim interface interface-name string assert-interval number</a>

<b>Tree</b>	<a href="#">assert-interval</a>
<b>Range</b>	1 to 300
<b>Default</b>	60
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## database

<b>Description</b>	Database of PIM (S,G) (*,G), (*,*,RP) for the interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database</a>
<b>Tree</b>	<a href="#">database</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group [group](#) (*ipv4-address* | *ipv6-address*) [source](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Enter the group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-metric** *number*

<b>Description</b>	The metric associated by the Multicast RIB for the route towards the source or the RP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-metric-preference** *number*

<b>Description</b>	The preference associated by the Multicast RIB for the route towards the source or the RP
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-metric-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-metric-preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-rpt-bit** *boolean*

<b>Description</b>	The value is 'true' if the RPT bit is set and 'false' when the RPT bit is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-rpt-bit</a> <i>boolean</i>

<b>Tree</b>	<a href="#">assert-rpt-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-state** *keyword*

<b>Description</b>	The ASSERT state for this entry  Where multiple PIM routers peer over a shared LAN it possible for more than one upstream router to have valid forwarding state for a packet, which can lead to packet duplication. PIM does not attempt to prevent this from occurring. Instead it detects when this has happened and elects a single forwarder amongst the upstream routers to prevent further duplication. This election is performed using PIM Assert messages. Assert messages are also received by downstream routers on the LAN, and these cause subsequent Join or Prune messages to be sent to the upstream router that won the Assert.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">assert-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-info</li> <li>• lost-assert</li> <li>• won-assert</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-timer** *number*

<b>Description</b>	Assert time remaining  If the value of assert-state is 'lost-assert': the time remaining before the router transitions the assert-state to 'no-info'. If the value of assert-state is 'won-assert': the time remaining before the ASSERT message is resent.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-winner-address** (*ipv4-address* | *ipv6-address*)

**Description** The Assert Message winner's interface IP address

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [database group group](#) (*ipv4-address* | *ipv6-address*) [source](#) (*ipv4-address* | *ipv6-address*) [assert-winner-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [assert-winner-address](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-winner-metric** *number*

**Description** The ASSERT winner's metric associated by its Multicast RIB for the route towards the source or the RP

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [database group group](#) (*ipv4-address* | *ipv6-address*) [source](#) (*ipv4-address* | *ipv6-address*) [assert-winner-metric](#) *number*

**Tree** [assert-winner-metric](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-winner-metric-preference** *number*

**Description** The ASSERT winner's preference associated by its Multicast RIB for the route towards the source or the RP

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [database group group](#) (*ipv4-address* | *ipv6-address*) [source](#) (*ipv4-address* | *ipv6-address*) [assert-winner-metric-preference](#) *number*

**Tree** [assert-winner-metric-preference](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-winner-rpt-bit** *boolean*

<b>Description</b>	The value is 'true' if the RPT bit is set and 'false' when the RPT bit is not set
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">assert-winner-rpt-bit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">assert-winner-rpt-bit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**jp-rpt-pending-timer** *number*

<b>Description</b>	The time remaining before the router transitions the value of jp-rpt-state to 'no-info'  The timer is set when the (S,G,rpt) PIM Prune message is received.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">jp-rpt-pending-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">jp-rpt-pending-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**jp-rpt-state** *keyword*

<b>Description</b>	The Join Prune Rpt state for this entry on the interface  PIM Join or Prune messages are sent by the downstream routers towards the RPF neighbor. (S,G,rpt) state is a result of receiving (S,G, rpt) JP message from the downstream router on the RP tree.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">jp-rpt-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">jp-rpt-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-info</li> <li>joined</li> <li>prune-pend</li> </ul>

	<ul style="list-style-type: none"> <li>pruned</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### jp-rpt-timer *number*

<b>Description</b>	<p>The time remaining before the router transitions the value of jp-rpt-state to 'no-info'</p> <p>The timer is started or restarted when a valid Join message is received. If the value of this object is zero and jp-rpt-state is in 'join' state, it means that the downstream router sent a holdtime of '0xffff'. In this case, jp-rpt-state will not transition until an appropriate cancelling of Join or Prune message is received from the downstream router.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">jp-rpt-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">jp-rpt-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### jp-state *keyword*

<b>Description</b>	<p>The Join Prune state for this entry on the interface</p> <p>PIM Join or Prune messages are sent by the downstream routers towards the RPF neighbor.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">jp-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">jp-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-info</li> <li>joined</li> <li>prune-pend</li> <li>pruned</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**jp-timer** *number*

<b>Description</b>	The time remaining before the router transitions the value of jp-state to 'no-info'  The timer is started or restarted when a valid Join message is received. If the value of this object is zero and jp-state is 'join' state, it means that the downstream router sent a holdtime of '0xffff'. In this case, jp-state will not transition until an appropriate cancelling of Join or Prune message is received.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">jp-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">jp-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prune-pending-timer** *number*

<b>Description</b>	The time remaining before the router transitions the value of jp-state to 'no-info'  The timer is set when the PIM Prune message is received.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">prune-pending-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">prune-pending-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rp-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the Rendezvous Point(RP)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">rp-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">rp-address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-type** *keyword*

<b>Description</b>	Type of this entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">source-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• star-star-rp</li> <li>• star-g</li> <li>• sg</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**up-time** *string*

<b>Description</b>	Time elapsed since this entry was created
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dr-priority** *number*

<b>Description</b>	Designated Router (DR) priority value on this interface  The value of this object specifies the value sent in PIM Hello messages and used by routers to elect the Designated Router (DR).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">dr-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">dr-priority</a>

<b>Range</b>	0 to 4294967295
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-interval *number*

<b>Description</b>	Interval at which the router sends the PIM hello messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-interval</a>
<b>Range</b>	0 to 255
<b>Default</b>	30
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-multiplier *number*

<b>Description</b>	Number of hello multiplier to determine the hold time  This command configures the multiplier to determine the holdtime for a PIM neighbor on this interface. The hello-multiplier in conjunction with the hello-interval determines the holdtime for a PIM neighbor. The formula used to calculate the hello-holdtime is: $(\text{hello-interval} * \text{hello-multiplier}) / 10$ .
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">hello-multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-multiplier</a>
<b>Range</b>	20 to 100
<b>Default</b>	35
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### improved-assert *boolean*

<b>Description</b>	Whether the improved assert processing is enabled.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">improved-assert</a> <i>boolean</i>
<b>Tree</b>	<a href="#">improved-assert</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	IPv4 specific interface parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dr-address *string*

<b>Description</b>	IPv4 address of designated router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 dr-address</a> <i>string</i>
<b>Tree</b>	<a href="#">dr-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## oper-priority *number*

<b>Description</b>	The operational value of DR priority on this interface  The value of this object specifies the value sent in PIM Hello messages and used by routers to elect the Designated Router (DR). This is the operational value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 oper-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-priority</a>
<b>Range</b>	0 to 4294967295

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	The operational state of the PIM IPv4 interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> </ul>

- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	PIM Interface Statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## join-policy-drops *number*

<b>Description</b>	The number of Join Prune PDU drops due to policy mismatch The number of times the join policy match resulted in dropping Join-Prune message or one of the source group contained in the message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics join-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">join-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received

<b>Description</b>	Enter the received context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received</a>

<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-errors** *number*

<b>Description</b>	The number of errors while processing Assert messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received assert-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-messages** *number*

<b>Description</b>	The number of PIM Assert messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received assert-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-checksum-discard** *number*

<b>Description</b>	The number of discarded messages due to bad checksum received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received bad-checksum-discard</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-checksum-discard</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-encodings** *number*

**Description** The number of PIM messages with bad encodings received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv4 statistics received bad-encodings](#) *number*

**Tree** [bad-encodings](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-version-discard** *number*

**Description** The number of PIM messages with bad versions received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv4 statistics received bad-version-discard](#) *number*

**Tree** [bad-version-discard](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **candidate-rp-adv-no-router-alert** *number*

**Description** The number of Candidate-RP Advertisements without router alert option received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv4 statistics received candidate-rp-adv-no-router-alert](#) *number*

**Tree** [candidate-rp-adv-no-router-alert](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**hello-messages** *number*

<b>Description</b>	The number of PIM hello messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received hello-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hellos-dropped** *number*

<b>Description</b>	The number of dropped Hello messages which were received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received hellos-dropped</a> <i>number</i>
<b>Tree</b>	<a href="#">hellos-dropped</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**invalid-join-prune-messages** *number*

<b>Description</b>	The number of invalid PIM Join Prune messages received on this interface  A Join Prune message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a Invalid Join Prune notification is sent.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received invalid-join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**invalid-register-messages** *number*

<b>Description</b>	The number of invalid PIM Register messages received on this interface A Register message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a Invalid Register notification is sent.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received invalid-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**join-prune-errors** *number*

<b>Description</b>	The number of errors while processing Join-Prune messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received join-prune-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**join-prune-messages** *number*

<b>Description</b>	The number of Join Prune messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-unknown** *number*

<b>Description</b>	The number of PDUs dropped due to unknown neighborship The number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received neighbor-unknown</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-unknown</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**null-register-messages** *number*

<b>Description</b>	The number of PIM Null Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received null-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">null-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**packets** *number*

<b>Description</b>	The number of multicast data packets received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received packets</a> <i>number</i>
<b>Tree</b>	<a href="#">packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-errors** *number*

<b>Description</b>	The number of errors while processing Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received register-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-messages** *number*

<b>Description</b>	The number of PIM Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-stop-errors** *number*

<b>Description</b>	The number of errors while processing Register Stop messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received register-stop-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-stop-messages** *number*

<b>Description</b>	The number of PIM Register Stop messages received on this interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received register-stop-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-pdu-type *number*

<b>Description</b>	The number of packets received with an unsupported PIM type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics received unknown-pdu-type</a> <i>number</i>
<b>Tree</b>	<a href="#">unknown-pdu-type</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-policy-drops *number*

<b>Description</b>	The number of times the register policy match resulted in dropping Register Message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics register-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">register-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sg-count *number*

<b>Description</b>	The number of (S,G) entries on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics sg-count</a> <i>number</i>
<b>Tree</b>	<a href="#">sg-count</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### star-g-count *number*

<b>Description</b>	The number of (*,G) entries on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics star-g-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-g-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### star-star-rp-count *number*

<b>Description</b>	The number of (*,*,RP) entries on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics star-star-rp-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-star-rp-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted

<b>Description</b>	Enter the transmitted context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-messages** *number*

<b>Description</b>	The number of PIM Assert messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted assert-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-messages** *number*

<b>Description</b>	The number of PIM Hello messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted hello-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**join-prune-messages** *number*

<b>Description</b>	The number of Join Prune messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**packets** *number*

<b>Description</b>	The number of multicast data packets transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted packets</a> <i>number</i>

<b>Tree</b>	<a href="#">packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **register-stop-errors** *number*

<b>Description</b>	The number of PIM errors while trasmitting PIM Register Stop messages on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted register-stop-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **register-stop-messages** *number*

<b>Description</b>	The number of PIM Register Stop messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4 statistics transmitted register-stop-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv4-admin-state** *keyword*

<b>Description</b>	Administratively enable or disable PIM IPv4 address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv4-admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">ipv4-admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>



- disable

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	IPv6 specific interface parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dr-address *string*

<b>Description</b>	IPv6 address of Designated Router (DR)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 dr-address</a> <i>string</i>
<b>Tree</b>	<a href="#">dr-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## oper-priority *number*

<b>Description</b>	The operational value of Designated Router (DR) priority on this interface The value of this object specifies the value sent in PIM Hello messages and used by routers to elect the Designated Router (DR). This is the operational value.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 oper-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-priority</a>
<b>Range</b>	0 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	The operational state of the PIM IPv6 interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting</li></ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	PIM Interface statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## join-policy-drops *number*

<b>Description</b>	The number of Join Prune PDU drops due to policy mismatch The number of times the join policy match resulted in dropping Join-Prune message or one of the source group contained in the message.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics join-policy-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">join-policy-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received

<b>Description</b>	Enter the received context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-errors** *number*

**Description** The number of errors while processing Assert messages received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics received assert-errors](#) *number*

**Tree** [assert-errors](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **assert-messages** *number*

**Description** The number of PIM Assert messages received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics received assert-messages](#) *number*

**Tree** [assert-messages](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-checksum-discard** *number*

**Description** The number of discarded messages due to bad checksum received on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics received bad-checksum-discard](#) *number*

**Tree** [bad-checksum-discard](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-encodings** *number*

<b>Description</b>	The number of PIM messages with bad encodings received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received bad-encodings</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-encodings</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-version-discard** *number*

<b>Description</b>	The number of PIM messages with bad versions received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received bad-version-discard</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-version-discard</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-adv-no-router-alert** *number*

<b>Description</b>	The number of Candidate-RP Advertisements without router alert option received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received candidate-rp-adv-no-router-alert</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-adv-no-router-alert</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hello-messages** *number*

<b>Description</b>	The number of PIM hello messages received on this interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received hello-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hellos-dropped *number*

<b>Description</b>	The number of dropped Hello messages which were received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received hellos-dropped</a> <i>number</i>
<b>Tree</b>	<a href="#">hellos-dropped</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### invalid-join-prune-messages *number*

<b>Description</b>	The number of invalid PIM Join Prune messages received on this interface A Join Prune message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a Invalid Join Prune notification is sent.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received invalid-join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### invalid-register-messages *number*

<b>Description</b>	The number of invalid PIM Register messages received on this interface
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A Register message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a Invalid Register notification is sent.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received invalid-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **join-prune-errors** *number*

<b>Description</b>	The number of errors while processing Join-Prune messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received join-prune-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **join-prune-messages** *number*

<b>Description</b>	The number of Join Prune messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **neighbor-unknown** *number*

<b>Description</b>	The number of PDUs dropped due to unknown neighborship
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The number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received neighbor-unknown</a> <i>number</i>
<b>Tree</b>	<a href="#">neighbor-unknown</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **null-register-messages** *number*

<b>Description</b>	The number of PIM Null Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received null-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">null-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **packets** *number*

<b>Description</b>	The number of multicast data packets received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received packets</a> <i>number</i>
<b>Tree</b>	<a href="#">packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **register-errors** *number*

<b>Description</b>	The number of errors while processing Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received register-errors</a> <i>number</i>



<b>Tree</b>	<a href="#">register-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-messages *number*

<b>Description</b>	The number of PIM Register messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-stop-errors *number*

<b>Description</b>	The number of errors while processing Register Stop messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received register-stop-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-stop-messages *number*

<b>Description</b>	The number of PIM Register Stop messages received on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics received register-stop-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-pdu-type *number*

**Description** The number of packets received with an unsupported PIM type

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics received unknown-pdu-type](#) *number*

**Tree** [unknown-pdu-type](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-policy-drops *number*

**Description** The number of times the register policy match resulted in dropping Register Message

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics register-policy-drops](#) *number*

**Tree** [register-policy-drops](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sg-count *number*

**Description** The number of (S,G) entries on this interface

**Context** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string* [ipv6 statistics sg-count](#) *number*

**Tree** [sg-count](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**star-g-count** *number*

<b>Description</b>	The number of (*,G) entries on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics star-g-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-g-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**star-star-rp-count** *number*

<b>Description</b>	The number of (*,*,RP) entries on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics star-star-rp-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-star-rp-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted**

<b>Description</b>	Enter the transmitted context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert-messages** *number*

<b>Description</b>	The number of PIM Assert messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted assert-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">assert-messages</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello-messages *number*

<b>Description</b>	The number of PIM Hello messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted hello-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">hello-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### join-prune-messages *number*

<b>Description</b>	The number of Join Prune messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted join-prune-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">join-prune-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### packets *number*

<b>Description</b>	The number of multicast data packets transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted packets</a> <i>number</i>
<b>Tree</b>	<a href="#">packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-stop-errors** *number*

<b>Description</b>	The number of PIM errors while trasmitting PIM Register Stop messages on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted register-stop-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-stop-messages** *number*

<b>Description</b>	The number of PIM Register Stop messages transmitted on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6 statistics transmitted register-stop-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-stop-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-admin-state** *keyword*

<b>Description</b>	Administratively enable or disable PIM IPv6 address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">ipv6-admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">ipv6-admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-number-groups** *number*

<b>Description</b>	Limit the number of accepted (S, G) and (*, G) PIM join states on the interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-number-groups</a>
<b>Range</b>	1 to 16000
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbors**

<b>Description</b>	Details about PIM neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor** [address](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	Enter the neighbor list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

<b>Description</b>	IP address of a neighbor router
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dr-priority** *number*

<b>Description</b>	The dr-priority value received on hello message  This value indicates neighbor's DR priority which is received in the hello message. If the Hello Message did not contain the Designated Router (DR) priority field, the value of priority will be '1'.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">dr-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">dr-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dr-priority-present** *boolean*

<b>Description</b>	Indication of existence of DR priority on received hello message  This value of indicates whether the DR priority field was present in the Hello message received from the PIM neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">dr-priority-present</a> <i>boolean</i>
<b>Tree</b>	<a href="#">dr-priority-present</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expiry-time** *number*

<b>Description</b>	The time until the expiry of this neighbor  This value indicates the minimum time remaining before this PIM neighbor will be aged out.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address (ipv4-address-with-zone   ipv6-address-with-zone)</a> <a href="#">expiry-time</a> <i>number</i>

<b>Tree</b>	<a href="#">expiry-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **generated-id** *number*

<b>Description</b>	The Gen-Id value on the received hello message  This value indicates a randomly generated 32-bit value that is regenerated each time PIM forwarding is started or restarted on the interface, including when the router itself restarts.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">generated-id</a> <i>number</i>
<b>Tree</b>	<a href="#">generated-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hold-time** *number*

<b>Description</b>	This value indicates the value of the hold time present in the Hello message
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">hold-time</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **join-attribute-support** *boolean*

<b>Description</b>	Existence of Join-attribute in the received hello message  This value indicates whether the Hello Message received from the neighbor contained the Join Attribute field.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">join-attribute-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">join-attribute-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-delay** *number*

<b>Description</b>	The lan-delay value on received hello message  This value indicates the value of lan delay field present in the Hello message received from the neighbor.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">lan-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">lan-delay</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lan-delay-present** *boolean*

<b>Description</b>	Indication of existence of Lan Delay on received hello message  This value indicates whether the Hello message received from the neighbor contained the Lan Delay field.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">lan-delay-present</a> <i>boolean</i>
<b>Tree</b>	<a href="#">lan-delay-present</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**override-interval** *number*

<b>Description</b>	The override interval on the received hello message
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This value indicates the value of the override interval present in the Hello message.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">override-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">override-interval</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tracking-support** *boolean*

<b>Description</b>	Indication of existence of tracking-support on received hello message  This value indicates whether the T bit in the LAN Prune Delay option was present in the Hello message. This indicates the neighbor's capability to disable Join message suppression.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">tracking-support</a> <i>boolean</i>
<b>Tree</b>	<a href="#">tracking-support</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **up-time** *string*

<b>Description</b>	The time since when the neighbor has come up  This value indicates the time since this PIM neighbor (last) became a neighbor of the local router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">neighbors neighbor address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">up-time</a> <i>string</i>
<b>Tree</b>	<a href="#">up-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	The operational state of the PIM interface This simply tracks the operational state of the subinterface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting</li> </ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	IPv4 specific PIM parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable PIM address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## oper-state *keyword*

<b>Description</b>	The operational state of the PIM af instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> </ul>

- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics****Description**

Global PIM address family statistics

**Context**[network-instance name](#) *string* [protocols pim ipv4 statistics](#)**Tree**[statistics](#)

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarded-candidate-rp-advertisement-drops *number*

<b>Description</b>	The number of times the Candidate-RP Advertisements could not be forwarded
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics forwarded-candidate-rp-advertisement-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">forwarded-candidate-rp-advertisement-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarded-candidate-rp-advertisements *number*

<b>Description</b>	The number of Candidate-RP Advertisements that were forwarded C-RP-Adv's are forwarded when the received advertisement has a router alert set and the destination address is not the router's local address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics forwarded-candidate-rp-advertisements</a> <i>number</i>
<b>Tree</b>	<a href="#">forwarded-candidate-rp-advertisements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received

<b>Description</b>	Enter the received context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-advertisement-drops** *number*

<b>Description</b>	The number of received but dropped Candidate-RP Advertisements
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics received candidate-rp-advertisement-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-advertisement-messages** *number*

<b>Description</b>	The number of Candidate-RP Advertisements (C-RP-Adv) received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics received candidate-rp-advertisement-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-pdu-interface-drops** *number*

<b>Description</b>	The number of control PDU drops  These can be on an operationally down interface or on an interface on which PIM is not enabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics received control-pdu-interface-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">control-pdu-interface-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sg-count** *number*

<b>Description</b>	The number of (S,G)s
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics sg-count</a> <i>number</i>
<b>Tree</b>	<a href="#">sg-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **star-g-count** *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics star-g-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-g-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **star-star-rp-count** *number*

<b>Description</b>	The number of (*,*,RP)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics star-star-rp-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-star-rp-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transmitted**

<b>Description</b>	Enter the transmitted context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted</a>
<b>Tree</b>	<a href="#">transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**candidate-rp-advertisement-errors** *number*

<b>Description</b>	The number of errors while transmitting PIM Candidate-RP Advertisements
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted candidate-rp-advertisement-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-advertisement-messages** *number*

<b>Description</b>	The number of Candidate-RP Advertisements transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted candidate-rp-advertisement-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**null-register-messages** *number*

<b>Description</b>	The number of Null Register messages transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted null-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">null-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register-errors** *number*

<b>Description</b>	The number of errors while transmitting Register messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted register-errors</a> <i>number</i>

<b>Tree</b>	<a href="#">register-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-messages *number*

<b>Description</b>	The number of PIM Register messages transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted</a> <a href="#">register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-ttl-drops *number*

<b>Description</b>	The number of TTL dropped data PDUs The number of multicast data packets which could not be encapsulated in Register messages because the Time To Live (TTL) was zero.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv4 statistics transmitted</a> <a href="#">register-ttl-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">register-ttl-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6

<b>Description</b>	IPv6 specific PIM parameters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable PIM address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	The operational state of the PIM af instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power</li> </ul>

- Component is offline due to insufficient system power
- degraded
  - Component or process is in a degraded state
- warm-reboot
  - Component or process is currently warm rebooting
  - This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
  - Component or process is currently waiting
  - This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics****Description**

Global PIM address family statistics

**Context**[network-instance name](#) *string* [protocols pim ipv6 statistics](#)**Tree**[statistics](#)**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarded-candidate-rp-advertisement-drops** *number***Description**

The number of times the Candidate-RP Advertisements could not be forwarded

**Context**[network-instance name](#) *string* [protocols pim ipv6 statistics forwarded-candidate-rp-advertisement-drops](#) *number***Tree**[forwarded-candidate-rp-advertisement-drops](#)**Default**

0

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarded-candidate-rp-advertisements** *number*

<b>Description</b>	The number of Candidate-RP Advertisements that were forwarded C-RP-Adv's are forwarded when the received advertisement has a router alert set and the destination address is not the router's local address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics forwarded-candidate-rp-advertisements</a> <i>number</i>
<b>Tree</b>	<a href="#">forwarded-candidate-rp-advertisements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received**

<b>Description</b>	Enter the received context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics received</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-advertisement-drops** *number*

<b>Description</b>	The number of received but dropped Candidate-RP Advertisements
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics received candidate-rp-advertisement-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**candidate-rp-advertisement-messages** *number*

<b>Description</b>	The number of Candidate-RP Advertisements (C-RP-Adv) received
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics received candidate-rp-advertisement-messages</a> <i>number</i>

<b>Tree</b>	<a href="#">candidate-rp-advertisement-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### control-pdu-interface-drops *number*

<b>Description</b>	The number of control PDU drops These can be on an operationally down interface or on an interface on which PIM is not enabled.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics received control-pdu-interface-drops</a> <i>number</i>
<b>Tree</b>	<a href="#">control-pdu-interface-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sg-count *number*

<b>Description</b>	The number of (S,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics sg-count</a> <i>number</i>
<b>Tree</b>	<a href="#">sg-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### star-g-count *number*

<b>Description</b>	The number of (*,G)s
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics star-g-count</a> <i>number</i>
<b>Tree</b>	<a href="#">star-g-count</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### star-star-rp-count *number*

**Description** The number of (\*,\*,RP)s

**Context** [network-instance name](#) *string* [protocols pim ipv6 statistics star-star-rp-count](#) *number*

**Tree** [star-star-rp-count](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted

**Description** Enter the transmitted context

**Context** [network-instance name](#) *string* [protocols pim ipv6 statistics transmitted](#)

**Tree** [transmitted](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### candidate-rp-advertisement-errors *number*

**Description** The number of errors while transmitting PIM Candidate-RP Advertisements

**Context** [network-instance name](#) *string* [protocols pim ipv6 statistics transmitted candidate-rp-advertisement-errors](#) *number*

**Tree** [candidate-rp-advertisement-errors](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### candidate-rp-advertisement-messages *number*

**Description** The number of Candidate-RP Advertisements transmitted

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics transmitted candidate-rp-advertisement-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">candidate-rp-advertisement-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **null-register-messages** *number*

<b>Description</b>	The number of Null Register messages transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics transmitted null-register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">null-register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **register-errors** *number*

<b>Description</b>	The number of errors while transmitting Register messages
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics transmitted register-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">register-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **register-messages** *number*

<b>Description</b>	The number of PIM Register messages transmitted
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ipv6 statistics transmitted register-messages</a> <i>number</i>
<b>Tree</b>	<a href="#">register-messages</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-ttl-drops *number*

**Description** The number of TTL dropped data PDUs  
The number of multicast data packets which could not be encapsulated in Register messages because the Time To Live (TTL) was zero.

**Context** [network-instance name string protocols pim ipv6 statistics transmitted register-ttl-drops number](#)

**Tree** [register-ttl-drops](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multicast-ecmp-last-rebalance-time *string*

**Description** Last system time where multicast did a ecmp rebalance on this system

**Context** [network-instance name string protocols pim multicast-ecmp-last-rebalance-time string](#)

**Tree** [multicast-ecmp-last-rebalance-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multicast-ecmp-next-balance-time *number*

**Description** The time remaining until the next rebalance would occur.

**Context** [network-instance name string protocols pim multicast-ecmp-next-balance-time number](#)

**Tree** [multicast-ecmp-next-balance-time](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multicast-ecmp-rebalance-inprogress** *boolean*

<b>Description</b>	Whether or not multicast ECMP re-balancing is currently in progress.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim multicast-ecmp-rebalance-inprogress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">multicast-ecmp-rebalance-inprogress</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multicast-ecmp-rebalance-type** *keyword*

<b>Description</b>	The value of this object indicates the type of ECMP rebalance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim multicast-ecmp-rebalance-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">multicast-ecmp-rebalance-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>triggered</li> <li>operator-forced</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the PIM instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> <li>empty Component slot is empty</li> <li>downloading Component is downloading image into memory</li> <li>booting Component is booting downloaded image</li> </ul>

- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rendezvous-points****Description**

Define rendezvous points for sparse mode multicast

**Context**[network-instance name](#) *string* [protocols pim rendezvous-points](#)**Tree**[rendezvous-points](#)**Configurable**

True

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static****Description**

Static rendezvous point (RP) configuration

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim rendezvous-points static</a>
<b>Tree</b>	<a href="#">static</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rendezvous-point** [address](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	List of static rendezvous points
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim rendezvous-points static rendezvous-point address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">rendezvous-point</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the rendezvous point
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim rendezvous-points static rendezvous-point address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **group** [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	List of multicast groups for the rendezvous point
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim rendezvous-points static rendezvous-point address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	IP prefix of the multicast group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim rendezvous-points static rendezvous-point address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">group prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**spt-switchover**

<b>Description</b>	Define Shortest Path Tree (SPT) switchover threshold for multicast groups
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim spt-switchover</a>
<b>Tree</b>	<a href="#">spt-switchover</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Configure SPT switchover threshold for a multicast group prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim spt-switchover group prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	IP prefix of the multicast group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim spt-switchover group prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**threshold** (*number* | *keyword*)

<b>Description</b>	SPT switchover threshold in kbps
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim spt-switchover group prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">threshold</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">threshold</a>
<b>Range</b>	1 to 4294967294
<b>Units</b>	kbps
<b>Options</b>	<ul style="list-style-type: none"> <li>infinity</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm**

<b>Description</b>	Source Specific Multicast (SSM) configuration
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ssm</a>
<b>Tree</b>	<a href="#">ssm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ssm-ranges**

<b>Description</b>	List of accepted Source Specific Multicast (SSM) address ranges
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ssm ssm-ranges</a>
<b>Tree</b>	<a href="#">ssm-ranges</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-range** [ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Define an accepted SSM group range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ssm ssm-ranges group-range ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">group-range</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	A multicast IP prefix for SSM group range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim ssm ssm-ranges group-range ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trace-options

<b>Description</b>	Enter the trace-options context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trace

<b>Description</b>	Tracing parameter flags
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace</a>
<b>Tree</b>	<a href="#">trace</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### events

<b>Description</b>	Enable the tracing of PIM events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events</a>
<b>Tree</b>	<a href="#">events</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### all-event-types

**Description** Enable tracing for all events

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events all-event-types](#)

**Tree** [all-event-types](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### detail *boolean*

**Description** Enable detail tracing.

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events all-event-types detail](#) *boolean*

**Tree** [detail](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group-address (*ipv4-address* | *ipv6-address*)

**Description** The IP multicast group address for which to trace events

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events all-event-types group-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [group-address](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *reference*

**Description** Enable interface event tracing for a specific interface



<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events all-event-types interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events all-event-types source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### event-types

<b>Description</b>	Enable tracing for selected event types only
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types</a>
<b>Tree</b>	<a href="#">event-types</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### adjacency

<b>Description</b>	Enable tracing for adjacency events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types adjacency</a>
<b>Tree</b>	<a href="#">adjacency</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**assert**

<b>Description</b>	Enable tracing for assert events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types assert</a>
<b>Tree</b>	<a href="#">assert</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detail** *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types assert detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP multicast group address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types assert group-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types assert source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## data-exception

**Description** Enable tracing for data events

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events event-types data-exception](#)

**Tree** [data-exception](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## detail *boolean*

**Description** Enable detail tracing.

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events event-types data-exception detail](#) *boolean*

**Tree** [detail](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-address (*ipv4-address* | *ipv6-address*)

**Description** The IP multicast group address for which to trace events

**Context** [network-instance name](#) *string* [protocols pim trace-options trace events event-types data-exception group-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [group-address](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## source-address (*ipv4-address* | *ipv6-address*)

**Description** The source address for which to trace events

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types data-exception source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## database

<b>Description</b>	Enable tracing for db events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types database</a>
<b>Tree</b>	<a href="#">database</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## detail *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types database detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP multicast group address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types database group-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types database source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface**

<b>Description</b>	Enable tracing for interface events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types interface</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detail** *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types interface detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *reference*

<b>Description</b>	Enable interface event tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types interface interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## join-prune

<b>Description</b>	Enable tracing for jp events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types join-prune</a>
<b>Tree</b>	<a href="#">join-prune</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## detail *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types join-prune detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP multicast group address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types join-prune group-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## source-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source address for which to trace events
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types join-prune source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## messaging

<b>Description</b>	Enable tracing for msg events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types messaging</a>
<b>Tree</b>	<a href="#">messaging</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## pim-route-table

<b>Description</b>	Enable tracing for rtm events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types pim-route-table</a>
<b>Tree</b>	<a href="#">pim-route-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## detail *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types pim-route-table detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**register**

<b>Description</b>	Enable tracing for register events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types register</a>
<b>Tree</b>	<a href="#">register</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detail** *boolean*

<b>Description</b>	Enable detail tracing.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types register detail</a> <i>boolean</i>
<b>Tree</b>	<a href="#">detail</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP multicast group address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types register group-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source address for which to trace events
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace events event-types register source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True



**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet

**Description** Enable the tracing of PIM packets

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet](#)

**Tree** [packet](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all-packet-types

**Description** Enable tracing for all packet types

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet all-packet-types](#)

**Tree** [all-packet-types](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all-interfaces

**Description** Enable packet tracing for all interfaces

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet all-packet-types all-interfaces](#)

**Tree** [all-interfaces](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## egress *boolean*

**Description** Enable tracing for sent packets

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet all-packet-types egress \*boolean\*](#)

**Tree** [egress](#)

<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ingress *boolean*

<b>Description</b>	Enable tracing for received packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet all-packet-types ingress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *reference*

<b>Description</b>	Enable packet tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet all-packet-types interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet all-packet-types ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet all-packet-types ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-types

<b>Description</b>	Enable tracing for selected packet types only
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types</a>
<b>Tree</b>	<a href="#">packet-types</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## assert

<b>Description</b>	Enable tracing for assert packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types assert</a>
<b>Tree</b>	<a href="#">assert</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## all-interfaces

<b>Description</b>	Enable packet tracing for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types assert all-interfaces</a>
<b>Tree</b>	<a href="#">all-interfaces</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **egress** *boolean*

**Description** Enable tracing for sent packets

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet packet-types assert egress](#) *boolean*

**Tree** [egress](#)

**Default** true

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ingress** *boolean*

**Description** Enable tracing for received packets

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet packet-types assert ingress](#) *boolean*

**Tree** [ingress](#)

**Default** true

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface-name** *reference*

**Description** Enable packet tracing for a specific interface

**Context** [network-instance name](#) *string* [protocols pim trace-options trace packet packet-types assert interface-name](#) *reference*

**Tree** [interface-name](#)

**Reference** [network-instance name](#) *string* [protocols pim interface interface-name](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types assert ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types assert ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hello

<b>Description</b>	Enable tracing for hello packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello</a>
<b>Tree</b>	<a href="#">hello</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### all-interfaces

<b>Description</b>	Enable packet tracing for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello all-interfaces</a>
<b>Tree</b>	<a href="#">all-interfaces</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress** *boolean*

<b>Description</b>	Enable tracing for sent packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello egress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">egress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress** *boolean*

<b>Description</b>	Enable tracing for received packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello ingress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *reference*

<b>Description</b>	Enable packet tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types hello ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### join-prune

<b>Description</b>	Enable tracing for join-prune packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune</a>
<b>Tree</b>	<a href="#">join-prune</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### all-interfaces

<b>Description</b>	Enable packet tracing for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune all-interfaces</a>
<b>Tree</b>	<a href="#">all-interfaces</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress** *boolean*

<b>Description</b>	Enable tracing for sent packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune egress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">egress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress** *boolean*

<b>Description</b>	Enable tracing for received packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune ingress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *reference*

<b>Description</b>	Enable packet tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types join-prune ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register

<b>Description</b>	Enable tracing for register packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register</a>
<b>Tree</b>	<a href="#">register</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### all-interfaces

<b>Description</b>	Enable packet tracing for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register all-interfaces</a>
<b>Tree</b>	<a href="#">all-interfaces</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress** *boolean*

<b>Description</b>	Enable tracing for sent packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register egress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">egress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress** *boolean*

<b>Description</b>	Enable tracing for received packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register ingress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *reference*

<b>Description</b>	Enable packet tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### register-stop

<b>Description</b>	Enable tracing for register-stop packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop</a>
<b>Tree</b>	<a href="#">register-stop</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### all-interfaces

<b>Description</b>	Enable packet tracing for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop all-interfaces</a>
<b>Tree</b>	<a href="#">all-interfaces</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress** *boolean*

<b>Description</b>	Enable tracing for sent packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop egress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">egress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress** *boolean*

<b>Description</b>	Enable tracing for received packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop ingress</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ingress</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *reference*

<b>Description</b>	Enable packet tracing for a specific interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop interface-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-name</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim interface interface-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4 *boolean*

<b>Description</b>	Enable tracing for PIM ipv4 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop ipv4</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv6 *boolean*

<b>Description</b>	Enable tracing for PIM ipv6 packets
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim trace-options trace packet packet-types register-stop ipv6</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ptp

<b>Description</b>	Per network instance PTP configuration and state
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

<b>Description</b>	Operational state of PTP within the network instance This is dependent on the administrative state of the ptp instance, the administrative state of the this network-instance under ptp, and the operational state of the network-instance itself.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ptp oper-state</a> <i>keyword</i>

<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-limit** *number*

<b>Description</b>	Number of discovered peers allowed for network-instance If not defined then the number is not restricted within this network-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ptp</a> <a href="#">peer-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-limit</a>
<b>Range</b>	1 to 512
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address-ipv4** *string*

<b>Description</b>	IPv4 source address to be used for PTP messages sent in this network-instance Only unicast IP supported.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ptp</a> <a href="#">source-address-ipv4</a> <i>string</i>
<b>Tree</b>	<a href="#">source-address-ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address-ipv6** *string*

<b>Description</b>	IPv6 source address to be used for PTP messages sent in this network-instance Only unicast IP supported.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">ptp</a> <a href="#">source-address-ipv6</a> <i>string</i>
<b>Tree</b>	<a href="#">source-address-ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7220 IXR-D5, 7250 IXR-X3b

**route-table**

<b>Description</b>	Enter the route-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a>

<b>Tree</b>	<a href="#">route-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ipv4-unicast

<b>Description</b>	The container for the IPv4 unicast routing table of the network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a>
<b>Tree</b>	<a href="#">ipv4-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **route** [ipv4-prefix](#) *string* [route-type](#) *identityref* [route-owner](#) *string* [id](#) *number* [origin-network-instance](#) *reference*

<b>Description</b>	Enter the route list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <i>identityref</i> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **ipv4-prefix** *string*

<b>Description</b>	The IPv4 prefix associated with the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <i>identityref</i> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **route-type** *identityref*

<b>Description</b>	The type of the IP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <i>identityref</i> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>



**Options**

- aggregate  
Locally configured aggregate route
- arp-nd  
IP route added by ARP ND.
- bgp  
Border Gateway Protocol version 4
- bgp-label  
Border Gateway Protocol labeled routes
- bgp-evpn  
BGP Ethernet VPN (EVPN)
- bgp-ipvpn  
BGP IP VPN
- dhcp  
IP (default) route added by DHCP.
- gribi  
A gRIBI route
- host  
A host route
- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

**route-owner** *string*

<b>Description</b>	The application name of the owner of the IP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	An owner-assigned index value that is unique for each of the routes for a given prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**origin-network-instance** *reference*

<b>Description</b>	Origin network instance of the route (where it was originally learned or configured)  If the route was leaked from another network instance, the value of this leaf reflects the network-instance from which it was learned. If it was not leaked the value is the same as the parent network-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active** *boolean*

<b>Description</b>	If set to true then the route is installed as the active route for the IP prefix in the FIB. A route can be inactive because there is a more preferred route for the same prefix or else its next-hops are unresolved.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <i>active</i> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## fib-programming

<b>Description</b>	Container for state related to the FIB programming of the object
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">fib-programming</a>
<b>Tree</b>	<a href="#">fib-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-failed-complexes *string*

<b>Description</b>	List of forwarding complexes that reported a failure for the last operation. They appear in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">fib-programming last-failed-complexes</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failed-complexes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## last-failed-operation-type *keyword*

<b>Description</b>	The last operation type that failed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">fib-programming last-failed-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-failed-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• add The current or last operation was an attempt to create a new entry.</li> <li>• delete</li> </ul>

- The current or last operation was an attempt to delete an existing entry.
- modify
  - The current or last operation was an attempt to modify an existing entry.
- none
  - There was no prior operation for this entry or there is no current operation that is in process

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-successful-operation-timestamp** *string*

<b>Description</b>	<p>The date and time of the last operation to complete successfully, if the entry was not suppressed.</p> <p>A delete operation is immediately timestamped by FIB manager on the assumption that it will ultimately be successful on all complexes. For other operations the timestamp is generated when the last complex that was expected to respond has responded with a success acknowledgement.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number origin-network-instance reference fib-programming last-successful-operation-timestamp</a> <i>string</i>
<b>Tree</b>	<a href="#">last-successful-operation-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-successful-operation-type** *keyword*

<b>Description</b>	The last operation type that completed successfully, if the entry was not suppressed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number origin-network-instance reference fib-programming last-successful-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-successful-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• add           <ul style="list-style-type: none"> <li>The current or last operation was an attempt to create a new entry.</li> </ul> </li> <li>• delete           <ul style="list-style-type: none"> <li>The current or last operation was an attempt to delete an existing entry.</li> </ul> </li> <li>• modify</li> </ul>

- The current or last operation was an attempt to modify an existing entry.
- none
  - There was no prior operation for this entry or there is no current operation that is in process

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pending-operation-type** *keyword*

<b>Description</b>	The current operation type that is in progress because not all complexes have responded.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">fib-programming</a> <a href="#">pending-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pending-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• add           <ul style="list-style-type: none"> <li>The current or last operation was an attempt to create a new entry.</li> </ul> </li> <li>• delete           <ul style="list-style-type: none"> <li>The current or last operation was an attempt to delete an existing entry.</li> </ul> </li> <li>• modify           <ul style="list-style-type: none"> <li>The current or last operation was an attempt to modify an existing entry.</li> </ul> </li> <li>• none           <ul style="list-style-type: none"> <li>There was no prior operation for this entry or there is no current operation that is in process</li> </ul> </li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **suppressed** *boolean*

<b>Description</b>	When true, FIB programming for this entry has been suppressed and it is only installed in the control plane route table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">fib-programming</a> <a href="#">suppressed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suppressed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**gribi-metadata** *binary*

<b>Description</b>	Metadata persistently stored with the entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">gribi-metadata</a> <i>binary</i>
<b>Tree</b>	<a href="#">gribi-metadata</a>
<b>String Length</b>	0 to 8
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

**last-app-update** *string*

<b>Description</b>	The date and time of the last update of this route by the owning application or protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">last-app-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-app-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**leakable** *boolean*

<b>Description</b>	Reads true when the route was matched and accepted by the route-leaking inter-instance export-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">leakable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leakable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric** *number*

<b>Description</b>	The metric of the IP route. In general, when comparing two routes with the same owner and preference, the route with the lower metric is the one that is activated and used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group** *reference*

<b>Description</b>	The next-hop-group indirection object used by this route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group-network-instance** *reference*

<b>Description</b>	The network instance where the next-hop-group can be found. If unspecified, the next hop group is in the local network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">next-hop-group-network-instance reference</a>
<b>Tree</b>	<a href="#">next-hop-group-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**preference** *number*

<b>Description</b>	The IP route table preference. This is sometimes called the administrative distance of the route. In general, when comparing any two routes, the route with the lower preference is the one that is activated and used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">preference</a> <i>number</i>
<b>Tree</b>	<a href="#">preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resilient-hash** *boolean*

<b>Description</b>	Set to true if the route is covered by a resilient-hash-prefix entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv4-unicast route ipv4-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference</a> <a href="#">resilient-hash</a> <i>boolean</i>
<b>Tree</b>	<a href="#">resilient-hash</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**target-network-instances** *reference*

<b>Description</b>	List of network-instances that have imported this route as a result of matching and accepting it in their inter-instance import-policy
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route</a> <a href="#">ipv4-prefix</a> <i>string</i> <a href="#">route-type</a> <i>identityref</i> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <i>reference</i> <a href="#">target-network-instances</a> <i>reference</i>
<b>Tree</b>	<a href="#">target-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## route-summary

<b>Description</b>	Route summary information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route-summary</a>
<b>Tree</b>	<a href="#">route-summary</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## route-type [ip-route-type-name](#) *identityref*

<b>Description</b>	Enter the route-type list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route-summary route-type</a> <a href="#">ip-route-type-name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">route-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## [ip-route-type-name](#) *identityref*

<b>Description</b>	IP route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast route-summary route-type</a> <a href="#">ip-route-type-name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">aggregate</a> Locally configured aggregate route</li> <li>• <a href="#">arp-nd</a> IP route added by ARP ND.</li> <li>• <a href="#">bgp</a> Border Gateway Protocol version 4</li> <li>• <a href="#">bgp-label</a></li> </ul>

## Border Gateway Protocol labeled routes

- bgp-evpn  
BGP Ethernet VPN (EVPN)
- bgp-ipvpn  
BGP IP VPN
- dhcp  
IP (default) route added by DHCP.
- gribi  
A gRIBI route
- host  
A host route
- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

**active-routes** *number***Description**

Total number of prefixes associated with this route type that were submitted to fib-mgr and that fib-mgr successfully installed as active routes

**Context**

[network-instance name](#) *string* [route-table ipv4-unicast route-summary route-type ip-route-type-name](#) *identityref* [active-routes](#) *number*

<b>Tree</b>	<a href="#">active-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## active-routes *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, with an active route in the FIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a> <a href="#">active-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## active-routes-with-ecmp *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, that have an active route in the FIB with multiple ECMP next-hops.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a> <a href="#">active-routes-with-ecmp</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes-with-ecmp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## fib-failed-routes *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, that were not installed successfully because datapath resources were unavailable.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a> <a href="#">fib-failed-routes</a> <i>number</i>

<b>Tree</b>	<a href="#">fib-failed-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### resilient-hash-routes *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, with an active route in the FIB that have resilient hash support.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a> <a href="#">resilient-hash-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">resilient-hash-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### total-routes *number*

<b>Description</b>	The total number of routes, active and inactive, belonging to this address family, that are present in the routing table.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv4-unicast</a> <a href="#">statistics</a> <a href="#">total-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">total-routes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ipv6-unicast

<b>Description</b>	The container for the IPv6 unicast routing table of the network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a>
<b>Tree</b>	<a href="#">ipv6-unicast</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### route [ipv6-prefix](#) *string* [route-type](#) [identityref](#) [route-owner](#) *string* [id](#) *number* [origin-network-instance](#) *reference*

<b>Description</b>	Enter the route list instance
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number origin-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ipv6-prefix** *string*

<b>Description</b>	The IPv6 prefix associated with the route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number origin-network-instance</a> <i>reference</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-type** *identityref*

<b>Description</b>	The type of the IP route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number origin-network-instance</a> <i>reference</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• aggregate Locally configured aggregate route</li> <li>• arp-nd IP route added by ARP ND.</li> <li>• bgp Border Gateway Protocol version 4</li> <li>• bgp-label Border Gateway Protocol labeled routes</li> <li>• bgp-evpn BGP Ethernet VPN (EVPN)</li> <li>• bgp-ipvpn BGP IP VPN</li> <li>• dhcp IP (default) route added by DHCP.</li> <li>• gribi A gRIBI route</li> </ul>

- host  
A host route
- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

**route-owner *string*****Description**

The application name of the owner of the IP route

**Context**

[network-instance name](#) *string* [route-table](#) [ipv6-unicast route](#) [ipv6-prefix](#) *string* [route-type](#) [identityref](#) [route-owner](#) *string* [id](#) [number](#) [origin-network-instance](#) *reference*

**Configurable**

False

**Platforms**

Supported on all platforms

**id *number*****Description**

An owner-assigned index value that is unique for each of the routes for a given prefix.

**Context**

[network-instance name](#) *string* [route-table](#) [ipv6-unicast route](#) [ipv6-prefix](#) *string* [route-type](#) [identityref](#) [route-owner](#) *string* [id](#) [number](#) [origin-network-instance](#) *reference*

**Configurable**

False

**Platforms** Supported on all platforms

### origin-network-instance *reference*

**Description** Origin network instance of the route (where it was originally learned or configured)  
If the route was leaked from another network instance, the value of this leaf reflects the network-instance from which it was learned. If it was not leaked the value is the same as the parent network-instance.

**Context** [network-instance name string route-table ipv6-unicast route ipv6-prefix string route-type identityref route-owner string id number origin-network-instance reference](#)

**Reference** [network-instance name string](#)

**Configurable** False

**Platforms** Supported on all platforms

### active *boolean*

**Description** If set to true then the route is installed as the active route for the IP prefix in the FIB. A route can be inactive because there is a more preferred route for the same prefix or else its next-hops are unresolved.

**Context** [network-instance name string route-table ipv6-unicast route ipv6-prefix string route-type identityref route-owner string id number origin-network-instance reference active boolean](#)

**Tree** [active](#)

**Configurable** False

**Platforms** Supported on all platforms

### fib-programming

**Description** Container for state related to the FIB programming of the object

**Context** [network-instance name string route-table ipv6-unicast route ipv6-prefix string route-type identityref route-owner string id number origin-network-instance reference fib-programming](#)

**Tree** [fib-programming](#)

**Configurable** False

**Platforms** Supported on all platforms

**last-failed-complexes** *string*

<b>Description</b>	List of forwarding complexes that reported a failure for the last operation. They appear in the format (slot-number,complex-number).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference fib-programming last-failed-complexes</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failed-complexes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-failed-operation-type** *keyword*

<b>Description</b>	The last operation type that failed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string id number</i> <a href="#">origin-network-instance reference fib-programming last-failed-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-failed-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• add The current or last operation was an attempt to create a new entry.</li> <li>• delete The current or last operation was an attempt to delete an existing entry.</li> <li>• modify The current or last operation was an attempt to modify an existing entry.</li> <li>• none There was no prior operation for this entry or there is no current operation that is in process</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-successful-operation-timestamp** *string*

<b>Description</b>	<p>The date and time of the last operation to complete successfully, if the entry was not suppressed.</p> <p>A delete operation is immediately timestamped by FIB manager on the assumption that it will ultimately be successful on all complexes. For other operations the timestamp is generated when the last complex that was expected to respond has responded with a success acknowledgement.</p>
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">fib-programming</a> <a href="#">last-successful-operation-timestamp</a> <i>string</i>
<b>Tree</b>	<a href="#">last-successful-operation-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-successful-operation-type** *keyword*

<b>Description</b>	The last operation type that completed successfully, if the entry was not suppressed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">fib-programming</a> <a href="#">last-successful-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-successful-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>add</b> The current or last operation was an attempt to create a new entry.</li> <li>• <b>delete</b> The current or last operation was an attempt to delete an existing entry.</li> <li>• <b>modify</b> The current or last operation was an attempt to modify an existing entry.</li> <li>• <b>none</b> There was no prior operation for this entry or there is no current operation that is in process</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pending-operation-type** *keyword*

<b>Description</b>	The current operation type that is in progress because not all complexes have responded.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">fib-programming</a> <a href="#">pending-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pending-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>add</b> The current or last operation was an attempt to create a new entry.</li> </ul>

- delete  
The current or last operation was an attempt to delete an existing entry.
- modify  
The current or last operation was an attempt to modify an existing entry.
- none  
There was no prior operation for this entry or there is no current operation that is in process

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **suppressed** *boolean*

<b>Description</b>	When true, FIB programming for this entry has been suppressed and it is only installed in the control plane route table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance reference</a> <a href="#">fib-programming suppressed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suppressed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **gribi-metadata** *binary*

<b>Description</b>	Metadata persistently stored with the entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance reference</a> <a href="#">gribi-metadata</a> <i>binary</i>
<b>Tree</b>	<a href="#">gribi-metadata</a>
<b>String Length</b>	0 to 8
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

**last-app-update** *string*

<b>Description</b>	The date and time of the last update of this route by the owning application or protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">last-app-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-app-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**leakable** *boolean*

<b>Description</b>	Reads true when the route was matched and accepted by the route-leaking inter-instance export-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table ipv6-unicast route ipv6-prefix</a> <i>string</i> <a href="#">route-type identityref route-owner</a> <i>string</i> <a href="#">id number</a> <a href="#">origin-network-instance reference</a> <a href="#">leakable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leakable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric** *number*

<b>Description</b>	The metric of the IP route. In general, when comparing two routes with the same owner and preference, the route with the lower metric is the one that is activated and used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group** *reference*

<b>Description</b>	The next-hop-group indirection object used by this route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">next-hop-group</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group-network-instance** *reference*

<b>Description</b>	The network instance where the next-hop-group can be found. If unspecified, the next hop group is in the local network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">next-hop-group-network-instance</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">next-hop-group-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**preference** *number*

<b>Description</b>	The IP route table preference. This is sometimes called the administrative distance of the route. In general, when comparing any two routes, the route with the lower preference is the one that is activated and used for forwarding.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">preference</a> <i>number</i>
<b>Tree</b>	<a href="#">preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resilient-hash** *boolean*

<b>Description</b>	Set to true if the route is covered by a resilient-hash-prefix entry
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">resilient-hash</a> <i>boolean</i>
<b>Tree</b>	<a href="#">resilient-hash</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**target-network-instances** *reference*

<b>Description</b>	List of network-instances that have imported this route as a result of matching and accepting it in their inter-instance import-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">route-type</a> <a href="#">identityref</a> <a href="#">route-owner</a> <i>string</i> <a href="#">id</a> <i>number</i> <a href="#">origin-network-instance</a> <a href="#">reference</a> <a href="#">target-network-instances</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">target-network-instances</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-summary**

<b>Description</b>	Route summary information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast route-summary</a>

<b>Tree</b>	<a href="#">route-summary</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **route-type** [ip-route-type-name](#) *identityref*

<b>Description</b>	Enter the route-type list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">route-summary</a> <a href="#">route-type</a> <a href="#">ip-route-type-name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">route-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **ip-route-type-name** *identityref*

<b>Description</b>	IP route type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">route-summary</a> <a href="#">route-type</a> <a href="#">ip-route-type-name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">aggregate</a> Locally configured aggregate route</li> <li>• <a href="#">arp-nd</a> IP route added by ARP ND.</li> <li>• <a href="#">bgp</a> Border Gateway Protocol version 4</li> <li>• <a href="#">bgp-label</a> Border Gateway Protocol labeled routes</li> <li>• <a href="#">bgp-evpn</a> BGP Ethernet VPN (EVPN)</li> <li>• <a href="#">bgp-ipvpn</a> BGP IP VPN</li> <li>• <a href="#">dhcp</a> IP (default) route added by DHCP.</li> <li>• <a href="#">gribi</a> A gRIBI route</li> <li>• <a href="#">host</a> A host route</li> <li>• <a href="#">isis</a></li> </ul>

- IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **active-routes** *number*

<b>Description</b>	Total number of prefixes associated with this route type that were submitted to fib-mgr and that fib-mgr successfully installed as active routes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">route-summary</a> <a href="#">route-type</a> <a href="#">ip-route-type-name</a> <i>identityref</i> <a href="#">active-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-routes** *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, with an active route in the FIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">statistics</a> <a href="#">active-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-routes-with-ecmp** *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, that have an active route in the FIB with multiple ECMP next-hops.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">statistics</a> <a href="#">active-routes-with-ecmp</a> <i>number</i>
<b>Tree</b>	<a href="#">active-routes-with-ecmp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-failed-routes** *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, that were not installed successfully because datapath resources were unavailable.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">statistics</a> <a href="#">fib-failed-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">fib-failed-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resilient-hash-routes** *number*

<b>Description</b>	The total number of prefixes, belonging to this address family, with an active route in the FIB that have resilient hash support.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">statistics</a> <a href="#">resilient-hash-routes</a> <i>number</i>
<b>Tree</b>	<a href="#">resilient-hash-routes</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **total-routes** *number*

**Description** The total number of routes, active and inactive, belonging to this address family, that are present in the routing table.

**Context** [network-instance name](#) *string* [route-table](#) [ipv6-unicast](#) [statistics](#) [total-routes](#) *number*

**Tree** [total-routes](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **mpls**

**Description** The container for the MPLS routing table of the network instance.

**Context** [network-instance name](#) *string* [route-table](#) [mpls](#)

**Tree** [mpls](#)

**Configurable** False

**Platforms** Supported on all platforms

### **label-entry** [label-value](#) *number*

**Description** Enter the label-entry list instance

**Context** [network-instance name](#) *string* [route-table](#) [mpls](#) [label-entry](#) [label-value](#) *number*

**Tree** [label-entry](#)

**Configurable** False

**Platforms** Supported on all platforms

### **label-value** *number*

**Description** The MPLS label value

**Context** [network-instance name](#) *string* [route-table](#) [mpls](#) [label-entry](#) [label-value](#) *number*

**Range** 16 to 1048575

**Configurable** False

**Platforms** Supported on all platforms

### **entry-type** *identityref*

**Description** The entry type of the MPLS FIB entry.

**Context** [network-instance name](#) *string* [route-table](#) [mpls label-entry](#) [label-value](#) *number* [entry-type](#) *identityref*

**Tree** [entry-type](#)

**Options**

- esi  
ESI mpls label entry, used by BGP-EVPN
- pseudowire  
Pseudowire mpls label entry
- ldp  
Label distribution protocol
- network-instance  
Network Instance mpls label entry, used by EVPN or IP-VPN
- sr-mpls  
Segment routing using MPLS dataplane, programmed by segment routing manager.
- static-mpls  
Locally configured static MPLS route.

**Configurable** False

**Platforms** Supported on all platforms

### **last-app-update** *string*

**Description** The date and time of the last update of this MPLS label entry by the owning application or protocol.

**Context** [network-instance name](#) *string* [route-table](#) [mpls label-entry](#) [label-value](#) *number* [last-app-update](#) *string*

**Tree** [last-app-update](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

**next-bgp-instance** *reference*

<b>Description</b>	Enter the next-bgp-instance context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">label-entry</a> <a href="#">label-value</a> <i>number</i> <a href="#">next-bgp-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-bgp-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp-vpn</a> <a href="#">bgp-instance id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-ethernet-segment** *reference*

<b>Description</b>	If this ILM entry is for a pop label, and this label is below an EVPN label at the bottom of the stack, the label will identify an Ethernet Segment and forwarding in the network-instance may exclude the bridged subinterfaces associated with the Ethernet Segment
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">label-entry</a> <a href="#">label-value</a> <i>number</i> <a href="#">next-ethernet-segment</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-ethernet-segment</a>
<b>Reference</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance id</a> <i>reference</i> <a href="#">ethernet-segment name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-group** *reference*

<b>Description</b>	The next-hop-group indirection object used by this route. Applicable only if the operation is SWAP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">label-entry</a> <a href="#">label-value</a> <i>number</i> <a href="#">next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-network-instance** *reference*

<b>Description</b>	If this ILM entry is for a pop label, and this label is at the bottom of the stack, the next forwarding lookup will be done in the referenced network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">label-entry</a> <a href="#">label-value</a> <a href="#">number</a> <a href="#">next-network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**operation** *keyword*

<b>Description</b>	The forwarding operation associated with the MPLS label entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">label-entry</a> <a href="#">label-value</a> <a href="#">number</a> <a href="#">operation</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operation</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pop</li> <li>• swap</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-entries** *number*

<b>Description</b>	The total number of MPLS entries that are active in the FIB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">mpls</a> <a href="#">statistics</a> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### next-hop *index number*

<b>Description</b>	Enter the next-hop list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <i>index number</i>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### *index number*

<b>Description</b>	A system-wide unique identifier of a next-hop object (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <i>index number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### counters

<b>Description</b>	Next-hop forwarding counters
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <i>index number</i> <a href="#">counters</a>
<b>Tree</b>	<a href="#">counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### *octets-forwarded number*

<b>Description</b>	The number of octets in packets forwarded to this next-hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <i>index number</i> <a href="#">counters</a> <i>octets-forwarded number</i>
<b>Tree</b>	<a href="#">octets-forwarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**packets-forwarded** *number*

<b>Description</b>	The number of packets forwarded to this next-hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">counters</a> <a href="#">packets-forwarded</a> <i>number</i>
<b>Tree</b>	<a href="#">packets-forwarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resource-allocation-failed** *boolean*

<b>Description</b>	An available decap-next-hop-statistics resource was not available for this next-hop in all forwarding complexes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">counters</a> <a href="#">resource-allocation-failed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">resource-allocation-failed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**decapsulate-header** *keyword*

<b>Description</b>	Packets matching this next-hop are decapsulated by removing the specified header.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">decapsulate-header</a> <i>keyword</i>
<b>Tree</b>	<a href="#">decapsulate-header</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• gre The encapsulation header is a Generic Routing Encapsulation header.</li> <li>• ipv4 The encapsulation header is an IPv4 packet header</li> <li>• ipv6 The encapsulation header is an IPv6 packet header</li> <li>• mpls The encapsulation header is one or more MPLS labels indicated by the pushed and popped label stack lists.</li> </ul>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### encapsulate-header *keyword*

<b>Description</b>	Packets matching this next-hop are encapsulated by adding the specified header.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop index</a> <i>number</i> <a href="#">encapsulate-header</a> <i>keyword</i>
<b>Tree</b>	<a href="#">encapsulate-header</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• gre The encapsulation header is a Generic Routing Encapsulation header.</li> <li>• ipv4 The encapsulation header is an IPv4 packet header</li> <li>• ipv6 The encapsulation header is an IPv6 packet header</li> <li>• mpls The encapsulation header is one or more MPLS labels indicated by the pushed and popped label stack lists.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ip-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The next-hop IP address. Only populated when the next-hop type is indirect or tunnel or static-mpls. For a VXLAN tunnel this is the destination VTEP address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop index</a> <i>number</i> <a href="#">ip-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ip-in-ip

<b>Description</b>	Specifies details of the IP-in-IP header added to the packet. This is valid only when encapsulate-header is ipv4 or ipv6
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop index</a> <i>number</i> <a href="#">ip-in-ip</a>

<b>Tree</b>	<a href="#">ip-in-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **dst-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Destination IP address to use for the encapsulated packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <a href="#">number</a> <a href="#">ip-in-ip</a> <a href="#">dst-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">dst-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **src-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address to use for the encapsulated packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <a href="#">number</a> <a href="#">ip-in-ip</a> <a href="#">src-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">src-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **mac-address** *string*

<b>Description</b>	The MAC address of the next-hop that has been provided directly. No value is populated if the next-hop IP is resolved by an ARP or IPv6 ND entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <a href="#">number</a> <a href="#">mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **mpls**

<b>Description</b>	Enter the mpls context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <a href="#">number</a> <a href="#">mpls</a>



<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### entropy-label-transmit *boolean*

<b>Description</b>	Entropy label (EL/ELI) is pushed when transmitting to this next-hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <i>number</i> <a href="#">mpls</a> <a href="#">entropy-label-transmit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-transmit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### pushed-mpls-label-stack (*number* | *keyword*)

<b>Description</b>	The list of MPLS labels to push onto the packet when forwarding to this particular next-hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <i>number</i> <a href="#">mpls</a> <a href="#">pushed-mpls-label-stack</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">pushed-mpls-label-stack</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

### network-instance *reference*

<b>Description</b>	Indicates that the next-hop is another network instance. If this is specified but an IP address or interface is not provided, the meaning is that a new IP lookup should occur in the other network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <i>number</i> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### programmed-index *number*

<b>Description</b>	The index assigned to the next-hop by the gRIBI client
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">programmed-index</a> <i>number</i>
<b>Tree</b>	<a href="#">programmed-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### resolving-route

<b>Description</b>	Enter the resolving-route context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-route</a>
<b>Tree</b>	<a href="#">resolving-route</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The prefix of the resolving route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-route</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">ip-prefix</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### next-hop-group *reference*

<b>Description</b>	Reference to the next-hop-group used by the route that resolves this next-hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-route</a> <a href="#">next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>

<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-owner** *string*

<b>Description</b>	The application name of the owner of the resolving route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <i>number</i> <a href="#">resolving-route</a> <a href="#">route-owner</a> <i>string</i>
<b>Tree</b>	<a href="#">route-owner</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-type** *identityref*

<b>Description</b>	The type of the resolving route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index</a> <i>number</i> <a href="#">resolving-route</a> <a href="#">route-type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">route-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• aggregate Locally configured aggregate route</li> <li>• arp-nd IP route added by ARP ND.</li> <li>• bgp Border Gateway Protocol version 4</li> <li>• bgp-label Border Gateway Protocol labeled routes</li> <li>• bgp-evpn BGP Ethernet VPN (EVPN)</li> <li>• bgp-ipvpn BGP IP VPN</li> <li>• dhcp IP (default) route added by DHCP.</li> <li>• gribi A gRIBI route</li> <li>• host A host route</li> </ul>

- isis  
IS-IS
- local  
A directly connected route
- linux  
IP route added by the linux kernel.
- ndk1  
Route added by an agent application using the NDK
- ndk2  
Route added by an agent application using the NDK
- ospfv2  
OSPFv2
- ospfv3  
OSPFv3
- static  
Locally configured static route

**Configurable**

False

**Platforms**

Supported on all platforms

**resolving-tunnel****Description**

Enter the resolving-tunnel context

**Context**[network-instance name](#) [string](#) [route-table](#) [next-hop](#) [index](#) [number](#) [resolving-tunnel](#)**Tree**[resolving-tunnel](#)**Configurable**

False

**Platforms**

Supported on all platforms

**ip-prefix (*ipv4-prefix* | *ipv6-prefix*)****Description**

The prefix of the resolving tunnel.

**Context**[network-instance name](#) [string](#) [route-table](#) [next-hop](#) [index](#) [number](#) [resolving-tunnel](#) [ip-prefix \(\*ipv4-prefix\* | \*ipv6-prefix\*\)](#)**Tree**[ip-prefix](#)**Configurable**

False

**Platforms**

Supported on all platforms

**next-hop-group** *reference*

<b>Description</b>	Reference to the next-hop-group used by the tunnel that resolves this next-hop
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-tunnel next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tunnel-id** *number*

<b>Description</b>	An owner-assigned index value that is unique for each of the tunnels terminating at a particular prefix
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-tunnel tunnel-id</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tunnel-owner** *string*

<b>Description</b>	The application name of the owner of the resolving tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-tunnel tunnel-owner</a> <i>string</i>
<b>Tree</b>	<a href="#">tunnel-owner</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tunnel-type** *identityref*

<b>Description</b>	The type of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">resolving-tunnel tunnel-type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">tunnel-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ip-in-ip</li> </ul>

- Tunnels with IP-in-IP encapsulation
- gre
  - Tunnels with GRE encapsulation
- sr-isis
  - Segment routing using MPLS dataplane, programmed by IS-IS
- sr-ospfv2
  - Segment routing using MPLS dataplane, programmed by OSPFv2
- sr-ospfv3
  - Segment routing using MPLS dataplane, programmed by OSPFv3
- te-policy-sr-mpls-colored
  - Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color
- te-policy-sr-mpls-uncolored
  - Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.
- vxlan
  - Tunnels based on VXLAN encapsulation

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### subinterface *reference*

<b>Description</b>	The next-hop interface. Only populated when the next-hop type is direct.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">subinterface</a> <i>reference</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### type *identityref*

<b>Description</b>	The next-hop type used by the datapath.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• extract</li> </ul>

Next-hop will cause matching packets to be delivered to the CPM.

- direct

Next-hop was resolved by a local route - i.e. it is an address on a connected subnet.

- discard

Next-hop will cause matching packets to be dropped without ICMP generation.

- reject

Next-hop will cause matching packets to be dropped with ICMP generation.

- indirect

Next-hop was resolved by a non-local route - i.e. it is not an address on a connected subnet.

- mpls

An MPLS label will be pushed when forwarding to this next-hop.

- tunnel

Next-hop is a tunnel.

- broadcast

Next-hop will cause matching subnet-broadcast packets to be delivered to the control plane.

- redirect

Next-hop will redirect to another network-instance.

- interface-with-mac

Next-hop is associated with an outbound interface plus MAC address

**Configurable**

False

**Platforms**

Supported on all platforms

## vxlan

**Description**

Enter the vxlan context

**Context**

[network-instance name](#) *string* [route-table next-hop index](#) *number* [vxlan](#)

**Tree**

[vxlan](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**destination-mac** *string*

<b>Description</b>	VXLAN inner ethernet destination mac-address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">vxlan destination-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">destination-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**source-mac** *string*

<b>Description</b>	VXLAN inner ethernet source mac-address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">vxlan source-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">source-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vni** *number*

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i> <a href="#">vxlan vni</a> <i>number</i>
<b>Tree</b>	<a href="#">vni</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group** [index](#) *number*

<b>Description</b>	Enter the next-hop-group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**index number**

<b>Description</b>	A system-wide unique identifier of a next-hop-group indirection object (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-next-hop id number**

<b>Description</b>	List of backup next-hops associated with the NHG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index number</a> <a href="#">backup-next-hop id</a> <i>number</i>
<b>Tree</b>	<a href="#">backup-next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id number**

<b>Description</b>	A unique identifier of a next-hop member (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index number</a> <a href="#">backup-next-hop id</a> <i>number</i>
<b>Range</b>	0 to 1023
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop reference**

<b>Description</b>	Enter the next-hop context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index number</a> <a href="#">backup-next-hop id</a> <i>number</i> <a href="#">next-hop reference</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop</a> <a href="#">index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resolved** *keyword*

<b>Description</b>	Set to true when the next-hop was resolved. This reads not-applicable for resolve=false next-hops.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">backup-next-hop id</a> <i>number</i> <b>resolved</b> <i>keyword</i>
<b>Tree</b>	<a href="#">resolved</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• true</li> <li>• false</li> <li>• not-applicable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-next-hop-group** *reference*

<b>Description</b>	The backup next-hop-group for the current group. When all entries within the next-hop group become unusable, the backup next-hop group is used if specified.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">backup-next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">backup-next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-programming**

<b>Description</b>	Container for state related to the FIB programming of the object
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">fib-programming</a>
<b>Tree</b>	<a href="#">fib-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-failed-complexes** *string*

<b>Description</b>	List of forwarding complexes that reported a failure for the last operation. They appear in the format (slot-number,complex-number).
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i> <a href="#">fib-programming</a> <a href="#">last-failed-complexes</a> <i>string</i>
<b>Tree</b>	<a href="#">last-failed-complexes</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-failed-operation-type** *keyword*

<b>Description</b>	The last operation type that failed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i> <a href="#">fib-programming</a> <a href="#">last-failed-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-failed-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• add The current or last operation was an attempt to create a new entry.</li> <li>• delete The current or last operation was an attempt to delete an existing entry.</li> <li>• modify The current or last operation was an attempt to modify an existing entry.</li> <li>• none There was no prior operation for this entry or there is no current operation that is in process</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-successful-operation-timestamp** *string*

<b>Description</b>	<p>The date and time of the last operation to complete successfully, if the entry was not suppressed.</p> <p>A delete operation is immediately timestamped by FIB manager on the assumption that it will ultimately be successful on all complexes. For other operations the timestamp is generated when the last complex that was expected to respond has responded with a success acknowledgement.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i> <a href="#">fib-programming</a> <a href="#">last-successful-operation-timestamp</a> <i>string</i>
<b>Tree</b>	<a href="#">last-successful-operation-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-successful-operation-type** *keyword*

<b>Description</b>	The last operation type that completed successfully, if the entry was not suppressed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i> <a href="#">fib-programming</a> <a href="#">last-successful-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-successful-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>add</b> The current or last operation was an attempt to create a new entry.</li> <li>• <b>delete</b> The current or last operation was an attempt to delete an existing entry.</li> <li>• <b>modify</b> The current or last operation was an attempt to modify an existing entry.</li> <li>• <b>none</b> There was no prior operation for this entry or there is no current operation that is in process</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pending-operation-type** *keyword*

<b>Description</b>	The current operation type that is in progress because not all complexes have responded.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group</a> <a href="#">index</a> <i>number</i> <a href="#">fib-programming</a> <a href="#">pending-operation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pending-operation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>add</b> The current or last operation was an attempt to create a new entry.</li> <li>• <b>delete</b> The current or last operation was an attempt to delete an existing entry.</li> <li>• <b>modify</b> The current or last operation was an attempt to modify an existing entry.</li> <li>• <b>none</b> There was no prior operation for this entry or there is no current operation that is in process</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**suppressed** *boolean*

<b>Description</b>	When true, FIB programming for this entry has been suppressed and it is only installed in the control plane route table
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">fib-programming suppressed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suppressed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**group-name-alias** *string*

<b>Description</b>	The alias name associated with this next-hop-group.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">group-name-alias</a> <i>string</i>
<b>Tree</b>	<a href="#">group-name-alias</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop id** *number*

<b>Description</b>	List of primary next-hops associated with the NHG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">next-hop id</a> <i>number</i>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	A unique identifier of a next-hop member (system allocated).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">next-hop id</a> <i>number</i>
<b>Range</b>	0 to 1023
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop** *reference*

<b>Description</b>	Enter the next-hop context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">next-hop id</a> <i>number</i> <a href="#">next-hop</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resolved** *keyword*

<b>Description</b>	Set to true when the next-hop was resolved. This reads not-applicable for resolve=false next-hops.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">next-hop id</a> <i>number</i> <a href="#">resolved</a> <i>keyword</i>
<b>Tree</b>	<a href="#">resolved</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• true</li> <li>• false</li> <li>• not-applicable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**weight** *number*

<b>Description</b>	<p>The configured/programmed weight assigned to the next-hop within the group</p> <p>This may be different from the actual weight used by the datapath, which changes depending on the next-hops that are up/down in the group. Traffic is balanced across the next-hops within the group in proportion of the actual weight.</p>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">next-hop-group index</a> <i>number</i> <a href="#">next-hop id</a> <i>number</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**programmed-index** *number*

<b>Description</b>	The index assigned to the next-hop-group by the gRIBI client
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group index</a> <i>number</i> <a href="#">programmed-index</a> <i>number</i>
<b>Tree</b>	<a href="#">programmed-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**router-id** *string*

<b>Description</b>	A identifier for the local network instance - typically used within associated routing protocols or signalling routing information in another network instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**segment-routing**

<b>Description</b>	Container with segment routing configuration options
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing</a>
<b>Tree</b>	<a href="#">segment-routing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls**

<b>Description</b>	Adding this container activates datapath support for SR-MPLS
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls</a>
<b>Tree</b>	<a href="#">mpls</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**global-block**

<b>Description</b>	Container with SRGB configuration that is applicable to all IGP protocol instances
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls global-block</a>
<b>Tree</b>	<a href="#">global-block</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-range** *reference*

<b>Description</b>	Reference to a static label range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls global-block label-range reference</a>
<b>Tree</b>	<a href="#">label-range</a>
<b>Reference</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-range-status** *keyword*

<b>Description</b>	Status of the label block. The label block may show as unavailable if there is pending cleanup.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls global-block label-range-status keyword</a>
<b>Tree</b>	<a href="#">label-range-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• available</li> <li>• unavailable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-prefix-sid** [prefix-sid-index](#) *number*

<b>Description</b>	List of configured protocol-independent prefix SIDs associated with the network-instance
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i>
<b>Tree</b>	<a href="#">local-prefix-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	4

### **prefix-sid-index** *number*

<b>Description</b>	An index to enumerate the different prefix sids
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i>
<b>Range</b>	1 to 4
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface** *string*

<b>Description</b>	Reference to the subinterface that owns the prefix(es) to be advertised. If ipv4-label-index is assigned a value then the primary IPv4 address of the referenced subinterface is advertised as a prefix SID. If ipv6-label-index is assigned a value then the primary IPv6 address of the referenced subinterface is advertised as a prefix SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i> <a href="#">interface</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-label-index** *number*

<b>Description</b>	Label index to add to SRGB base.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i> <a href="#">ipv4-label-index</a> <i>number</i>
<b>Tree</b>	<a href="#">ipv4-label-index</a>
<b>Range</b>	0 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-label-index** *number*

<b>Description</b>	Label index to add to SRGB base.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i> <a href="#">ipv6-label-index</a> <i>number</i>
<b>Tree</b>	<a href="#">ipv6-label-index</a>
<b>Range</b>	0 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**node-sid** *boolean*

<b>Description</b>	If set, the prefix SID(s) identity the router as a whole.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls local-prefix-sid prefix-sid-index</a> <i>number</i> <a href="#">node-sid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">node-sid</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-database**

<b>Description</b>	Database of all known prefix SIDs, local and remote.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database</a>
<b>Tree</b>	<a href="#">sid-database</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid** [prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value](#) *number* [protocol keyword](#) [protocol-instance](#) *number* [protocol-multi-topology](#) *number* [algorithm](#) *number*

<b>Description</b>	List of prefix SIDs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	The IPv4 or IPv6 prefix associated with the SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-label-value** *number*

<b>Description</b>	The MPLS label value associated with the SID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol** *keyword*

**Description** The protocol that provided the prefix SID

**Context** [network-instance name](#) *string* [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value](#) *number* [protocol keyword](#) [protocol-instance](#) *number* [protocol-multi-topology](#) *number* [algorithm](#) *number*

**Options**

- isis
- direct

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol-instance** *number*

**Description** The instance ID that provided the prefix SID

**Context** [network-instance name](#) *string* [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value](#) *number* [protocol keyword](#) [protocol-instance](#) *number* [protocol-multi-topology](#) *number* [algorithm](#) *number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol-multi-topology** *number*

**Description** The multi-topology ID that provided the prefix SID

**Context** [network-instance name](#) *string* [segment-routing mpls sid-database prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#) [sid-label-value](#) *number* [protocol keyword](#) [protocol-instance](#) *number* [protocol-multi-topology](#) *number* [algorithm](#) *number*

**Range** 0 to 4095

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm** *number*

<b>Description</b>	Contains the identifier of the algorithm the router uses to compute the reachability of the prefix to which the Prefix-SID is associated
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active** *boolean*

<b>Description</b>	When false, the prefix SID is inactive.  It could be inactive because it is involved in a prefix or SID conflict that occurred between different protocol-instance. It could also be inactive because datapath programming failed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-conflict** *boolean*

<b>Description</b>	Reads true when the prefix SID entry is involved in a prefix conflict that has occurred between protocols. This occurs when there are multiple entries in the SID database for the same prefix. All the conflicting entries become inactive except for the one with the smallest sid-index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">prefix-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefix-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sid-conflict** *boolean*

<b>Description</b>	Reads true when the prefix SID entry is involved in a SID conflict that has occurred between protocols (after first removing inter-protocol prefix conflict entries). All entries involved in a SID conflict that do not have the absolute lowest 'preference' value become inactive. In the SRL implementation local-prefix-sid entries are considered to have a lower numerical preference than remote prefix-sid entries. If there are still SID conflicts then all the remaining conflicting entries become inactive except for the one with the smallest sid-index.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">segment-routing mpls sid-database prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">sid-label-value</a> <i>number</i> <a href="#">protocol keyword</a> <a href="#">protocol-instance</a> <i>number</i> <a href="#">protocol-multi-topology</a> <i>number</i> <a href="#">algorithm</a> <i>number</i> <a href="#">sid-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">sid-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**static-routes**

<b>Description</b>	Enable the static-routes context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes</a>
<b>Tree</b>	<a href="#">static-routes</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Enter the admin-state context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the route list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
<b>Tree</b>	<a href="#">route</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	16384

**prefix** (*ipv4-prefix | ipv6-prefix*)

<b>Description</b>	Enter the prefix context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the static route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**installed** *boolean*

<b>Description</b>	If set to true, this indicates that the static route was installed into the datapath. If this is false then there are 3 possible reasons: (a) the admin-state is disable (b) there is another IP route for the same prefix that has a superior preference (c) the next-hop-group has no resolvable next-hops
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">installed</a> <i>boolean</i>
<b>Tree</b>	<a href="#">installed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**metric number**

<b>Description</b>	IGP metric of the static route.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**next-hop-group reference**

<b>Description</b>	Enter the next-hop-group context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">next-hop-group reference</a>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">next-hop-groups group name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**preference number**

<b>Description</b>	Route preference with lower values indicating a higher degree of preference.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">preference number</a>
<b>Tree</b>	<a href="#">preference</a>
<b>Range</b>	0 to 255
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**tag-set** *reference*

<b>Description</b>	Tag set to associate with the static route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">tag-set reference</a>
<b>Tree</b>	<a href="#">tag-set</a>
<b>Reference</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tag-value** (*number* | *hex-string*)

<b>Description</b>	Tag value to associate with the static route
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">static-routes route prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">tag-value</a> ( <i>number</i>   <i>hex-string</i> )
<b>Tree</b>	<a href="#">tag-value</a>
<b>String Length</b>	1 to 11
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-ipv4-address**

<b>Description</b>	Container for displaying information about the system IPv4 address of the default network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv4-address</a>
<b>Tree</b>	<a href="#">system-ipv4-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-down-reason** *keyword*

<b>Description</b>	The reason why the default network instance does not have a system IPv4 address
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv4-address</a> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">system-interface-not-bound</a></li> <li>• <a href="#">system-interface-has-no-ipv4-address</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	The operational state of the system IPv4 address binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv4-address</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">up</a> Component or process is operational</li> <li>• <a href="#">down</a> Component or process is not operational</li> <li>• <a href="#">empty</a> Component slot is empty</li> <li>• <a href="#">downloading</a> Component is downloading image into memory</li> <li>• <a href="#">booting</a> Component is booting downloaded image</li> <li>• <a href="#">starting</a> Component image operational, application processes starting</li> <li>• <a href="#">failed</a> Component or process has failed</li> <li>• <a href="#">synchronizing</a> Component is currently being synchronized</li> <li>• <a href="#">upgrading</a> Component is currently being upgraded</li> <li>• <a href="#">low-power</a> Component is offline due to insufficient system power</li> <li>• <a href="#">degraded</a> Component or process is in a degraded state</li> <li>• <a href="#">warm-reboot</a></li> </ul>

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## system-ipv6-address

<b>Description</b>	Container for displaying information about the system IPv6 address of the default network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv6-address</a>
<b>Tree</b>	<a href="#">system-ipv6-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## oper-down-reason *keyword*

<b>Description</b>	The reason why the default network instance does not have a system IPv6 address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv6-address</a> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>system-interface-not-bound</code></li> <li>• <code>system-interface-has-no-ipv6-address</code></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## oper-state *keyword*

<b>Description</b>	The operational state of the system IPv6 address binding
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">system-ipv6-address</a> <a href="#">oper-state</a> <i>keyword</i>

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<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tcp**

<b>Description</b>	State for TCP connections that have been established or could be established using the route tables of this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp</a>
<b>Tree</b>	<a href="#">tcp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**connection** [local-address](#) (*ipv4-address* | *ipv6-address*) [local-port](#) *number* [remote-address](#) (*ipv4-address* | *ipv6-address*) [remote-port](#) *number*

<b>Description</b>	List of TCP connections that are established or that are in the process of being established – i.e. excluding those in the LISTEN state. An entry in this list is transient in that it ceases to exist when (or soon after) the connection makes the transition to the CLOSED state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp</a> <a href="#">connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Tree</b>	<a href="#">connection</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The local IP address for this TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp</a> <a href="#">connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-port** *number*

<b>Description</b>	The local port number for this TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp</a> <a href="#">connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Range</b>	0 to 65535

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **remote-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The remote IP address for this TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **remote-port** *number*

<b>Description</b>	The remote port number for this TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **process-id** *number*

<b>Description</b>	The process ID of the application that owns the socket.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i> <a href="#">process-id</a> <i>number</i>
<b>Tree</b>	<a href="#">process-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **session-state** *keyword*

<b>Description</b>	The state of this TCP connection.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp connection</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">remote-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">remote-port</a> <i>number</i> <a href="#">session-state</a> <i>keyword</i>

**Tree** [session-state](#)

- Options**
- closed
  - syn-sent
  - syn-received
  - established
  - fin-wait1
  - fin-wait2
  - close-wait
  - last-ack
  - closing
  - time-wait
  - delete-tcb

**Configurable** False

**Platforms** Supported on all platforms

### **listening-application** [local-address](#) (*ipv4-address* | *ipv6-address*) [local-port](#) *number*

**Description** List of applications that are listening on a particular TCP port bound to the network-instance.

**Context** [network-instance name](#) *string* [tcp listening-application](#) [local-address](#) (*ipv4-address* | *ipv6-address*) [local-port](#) *number*

**Tree** [listening-application](#)

**Configurable** False

**Platforms** Supported on all platforms

### **local-address** (*ipv4-address* | *ipv6-address*)

**Description** The local IP address accepted by the application. An all-zeroes value for the *ipv4-address* means that any IPv4 address is accepted. An all-zeroes value for the *ipv6-address* means that any IPv6 address is accepted.

**Context** [network-instance name](#) *string* [tcp listening-application](#) [local-address](#) (*ipv4-address* | *ipv6-address*) [local-port](#) *number*

**Configurable** False

**Platforms** Supported on all platforms

**local-port** *number*

<b>Description</b>	The local port number accepted by the application.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">local-port</a> <i>number</i>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**process-id** *number*

<b>Description</b>	The process ID of the application that owns the socket.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">process-id</a> <i>number</i>
<b>Tree</b>	<a href="#">process-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-opens** *number*

<b>Description</b>	The total number of times that TCP connections have made a direct transition to the SYN-SENT state from the CLOSED state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">active-opens</a> <i>number</i>
<b>Tree</b>	<a href="#">active-opens</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**attempt-fails** *number*

<b>Description</b>	The total number of times that TCP connections have made a direct transition to the CLOSED state from either the SYN-SENT state or the SYN-RCVD state, plus the number of times that TCP connections have made a direct transition to the LISTEN state from the SYN-RCVD state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics attempt-fails</a> <i>number</i>
<b>Tree</b>	<a href="#">attempt-fails</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**established-resets** *number*

<b>Description</b>	The total number of times that TCP connections have made a direct transition to the CLOSED state from either the ESTABLISHED state or the CLOSE-WAIT state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics established-resets</a> <i>number</i>
<b>Tree</b>	<a href="#">established-resets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-checksum-errors** *number*

<b>Description</b>	The total number of segments that are received as bad TCP checksum errors.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics in-checksum-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">in-checksum-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-error-segments** *number*

<b>Description</b>	The total number of segments received in error (e.g., bad TCP checksums).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics in-error-segments</a> <i>number</i>

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<b>Tree</b>	<a href="#">in-error-segments</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-segments** *number*

<b>Description</b>	The total number of segments received, including those received in error. This count includes segments received on currently established connections.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">in-segments</a> <i>number</i>
<b>Tree</b>	<a href="#">in-segments</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-rst-segments** *number*

<b>Description</b>	The total number of TCP segments sent containing the RST flag.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">out-rst-segments</a> <i>number</i>
<b>Tree</b>	<a href="#">out-rst-segments</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **out-segments** *number*

<b>Description</b>	The total number of segments sent, including those on current connections but excluding those containing only retransmitted octets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">out-segments</a> <i>number</i>
<b>Tree</b>	<a href="#">out-segments</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**passive-opens** *number*

<b>Description</b>	The total number of times TCP connections have made a direct transition to the SYN-RCVD state from the LISTEN state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">passive-opens</a> <i>number</i>
<b>Tree</b>	<a href="#">passive-opens</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**retransmitted-segments** *number*

<b>Description</b>	The total number of segments retransmitted; that is, the number of TCP segments transmitted containing one or more previously transmitted octets.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tcp statistics</a> <a href="#">retransmitted-segments</a> <i>number</i>
<b>Tree</b>	<a href="#">retransmitted-segments</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**traffic-engineering**

<b>Description</b>	Container with traffic engineering options for the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering</a>
<b>Tree</b>	<a href="#">traffic-engineering</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-groups**

<b>Description</b>	Container for configuring admin groups
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering</a> <a href="#">admin-groups</a>
<b>Tree</b>	<a href="#">admin-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group name** *string*

<b>Description</b>	List of admin groups defined for this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering admin-groups group name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	The name of the admin group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering admin-groups group name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bit-position** *number*

<b>Description</b>	The bit-position value for the admin-group. The value for the admin group is an integer that represents one of the bit positions in the admin-group bitmask.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering admin-groups group name</a> <i>string</i> <a href="#">bit-position</a> <i>number</i>
<b>Tree</b>	<a href="#">bit-position</a>
<b>Range</b>	0 to 31
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**autonomous-system** *number*

<b>Description</b>	The autonomous system number of the network-instance, for protocols and pseudo-protocols that do not have their own configuration of AS number.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering autonomous-system number</a>
<b>Tree</b>	<a href="#">autonomous-system</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface [interface-name](#) *string*

<b>Description</b>	List of routed subinterfaces that have associated TE information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

<b>Description</b>	Name of a subinterface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering interface interface-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-group *reference*

<b>Description</b>	The list of admin-groups generically associated with the interface (not application specific)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering interface interface-name</a> <i>string</i> <a href="#">admin-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">admin-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering admin-groups</a> <a href="#">group name</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface-ref

**Description** Reference to a subinterface

**Context** [network-instance name](#) *string* [traffic-engineering interface interface-name](#) *string* [interface-ref](#)

**Tree** [interface-ref](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface *reference*

**Description** Reference to a base interface, for example a port or LAG

**Context** [network-instance name](#) *string* [traffic-engineering interface interface-name](#) *string* [interface-ref interface reference](#)

**Tree** [interface](#)

**Reference** [interface name](#) *string*

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## subinterface *reference*

**Description** Reference to a subinterface  
This requires the base interface to be specified using the interface leaf in this container.

**Context** [network-instance name](#) *string* [traffic-engineering interface interface-name](#) *string* [interface-ref subinterface reference](#)

**Tree** [subinterface](#)

**Reference** [interface name](#) *string* [subinterface index number](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**srlg-membership** *reference*

<b>Description</b>	The list of srlgs generically associated with the interface (not application specific)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering interface interface-name</a> <i>string</i> <a href="#">srlg-membership reference</a>
<b>Tree</b>	<a href="#">srlg-membership</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering shared-risk-link-groups group name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-metric** *number*

<b>Description</b>	The TE metric associated with the interface (not application specific)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering interface interface-name</a> <i>string</i> <a href="#">te-metric number</a>
<b>Tree</b>	<a href="#">te-metric</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-te-router-id** *string*

<b>Description</b>	A routable IPv4 address to identify the router uniquely in a TE domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering ipv4-te-router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv4-te-router-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-te-router-id** *string*

<b>Description</b>	A routable IPv6 address to identify the router uniquely in a TE domain.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering ipv6-te-router-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-te-router-id</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### shared-risk-link-groups

<b>Description</b>	Container for configuring SRLGs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering shared-risk-link-groups</a>
<b>Tree</b>	<a href="#">shared-risk-link-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### group *name string*

<b>Description</b>	List of shared risk link groups defined for this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering shared-risk-link-groups</a> <a href="#">group name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	The name of the shared risk link group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering shared-risk-link-groups</a> <a href="#">group name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### value *number*

<b>Description</b>	Group ID for the SRLG
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering shared-risk-link-groups</a> <a href="#">group name</a> <i>string</i> <a href="#">value</a> <i>number</i>



<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## traffic-engineering-policies

<b>Description</b>	Container with traffic engineering policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a>
<b>Tree</b>	<a href="#">traffic-engineering-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## binding-sid

<b>Description</b>	Configuration and state related to the label block(s) used for the binding SIDs associated with TE policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies binding-sid</a>
<b>Tree</b>	<a href="#">binding-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## static-label-block *reference*

<b>Description</b>	Reference to a static label range
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies binding-sid static-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">static-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## static-label-block-status *keyword*

<b>Description</b>	Status of the label block.
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The label block may show as unavailable if there is pending cleanup.

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies binding-sid static-label-block-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">static-label-block-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• available</li> <li>• unavailable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## explicit-paths

<b>Description</b>	Named paths used to specify SR policy segment lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths</a>
<b>Tree</b>	<a href="#">explicit-paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## path [explicit-path-name](#) *string*

<b>Description</b>	Enter the path list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths path explicit-path-name</a> <i>string</i>
<b>Tree</b>	<a href="#">path</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## explicit-path-name *string*

<b>Description</b>	A unique name to identify the explicit path
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths path explicit-path-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop *index number*

**Description** Enter the hop list instance

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [explicit-paths](#) [path](#) [explicit-path-name](#) *string* [hop index number](#)

**Tree** [hop](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### index *number*

**Description** The index number of the hop. Hops are processed in ascending sequence.

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [explicit-paths](#) [path](#) [explicit-path-name](#) *string* [hop index number](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip

**Description** Enable the ip context

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [explicit-paths](#) [path](#) [explicit-path-name](#) *string* [hop index number](#) [ip](#)

**Tree** [ip](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop-type *keyword*

**Description** Enter the hop-type context

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [explicit-paths](#) [path](#) [explicit-path-name](#) *string* [hop index number](#) [ip](#) [hop-type](#) *keyword*

**Tree** [hop-type](#)

<b>Default</b>	loose
<b>Options</b>	<ul style="list-style-type: none"> <li>strict           <p>A strict hop is always one hop away from the previous hop (or from the head-end in the case of the first hop). TE DB translates each strict hop into an adjacency-SID label. To be resolved to an adjacency SID, a strict hop must be a non-local IP address on a connected subnet (representing the neighbor's interface address on this subnet) or it must be a loopback or system address of the directly-connected neighbor.</p> </li> <li>loose           <p>A loose hop can be any number of hops away from the previous hop (or from the head-end in the case of the first hop). TE DB translates each loose hop into a node-SID label. A loose hop can be any IP address of the remote router associated with the node SID, not just the IP address associated with the node SID itself. Note that the endpoint of the policy is implicitly considered to be a final loose hop. If the final configured hop (previous hop of this implicit loose hop) is unnecessary TEDB indicates this to SR policy manager and the adjacency SID or node SID of the final configured hop is omitted from the datapath programming.</p> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ip-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	An IPv4 or IPv6 address that is a hop to be visited on the way to the destination
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths path explicit-path-name</a> <i>string</i> <a href="#">hop index number ip ip-address</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-label** *number*

<b>Description</b>	An MPLS label value representing a segment routing instruction
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths path explicit-path-name</a> <i>string</i> <a href="#">hop index number mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Range</b>	16 to 1048575

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy** *policy-name string*

<b>Description</b>	List of traffic engineering policies
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">traffic-engineering-policies policy policy-name string</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy-name** *string*

<b>Description</b>	The name of the traffic engineering policy
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">traffic-engineering-policies policy policy-name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Enable/disable the traffic engineering policy
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">traffic-engineering-policies policy policy-name string</a> <a href="#">admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**binding-sid**

<b>Description</b>	Identifier that opaquely represents the Uncolored Traffic Engineering Policy (a.k.a. SR-TE LSP) to upstream routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">binding-sid</a>
<b>Tree</b>	<a href="#">binding-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-label** *number*

<b>Description</b>	MPLS label that represents the Uncolored Traffic Engineering Policy to upstream routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">binding-sid</a> <a href="#">mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**endpoint** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Destination of the TE policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">endpoint</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">endpoint</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entropy-label**

<b>Description</b>	Options for configuring control and data plane aspects of entropy label
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">entropy-label</a>

<b>Tree</b>	<a href="#">entropy-label</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmit** *keyword*

<b>Description</b>	Specify conditions for adding ELI/EL under the stack of labels comprising the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">entropy-label</a> <a href="#">transmit</a> <i>keyword</i>
<b>Tree</b>	<a href="#">transmit</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**head-end** (*ipv4-address-excluding-all-zero* | *keyword*)

<b>Description</b>	Targeted head end address for an sr-mpls-colored policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">head-end</a> ( <i>ipv4-address-excluding-all-zero</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">head-end</a>
<b>Default</b>	local
<b>Options</b>	<ul style="list-style-type: none"> <li>• local</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-oper-state-change** *string*

<b>Description</b>	Time elapsed since the last operational state change for the Traffic Engineering Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **maintenance**

<b>Description</b>	Maintenance context for TE Policy, hold and wait timers, sBFD, revertive behavior and alike available under this context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">maintenance</a>
<b>Tree</b>	<a href="#">maintenance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **maintenance-policy reference**

<b>Description</b>	The maintenance policy to use with the TE policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">maintenance maintenance-policy reference</a>
<b>Tree</b>	<a href="#">maintenance-policy</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">maintenance-policies policy maintenance-policy-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **metric number**

<b>Description</b>	Metric for the TE Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**oper-down-reason** *identityref*

<b>Description</b>	The reason why the Traffic Engineering policy is operationally down. One of the following values:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">oper-down-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>te-policy-admin-disabled The TE policy is administratively disabled</li> <li>te-policy-no-valid-segment-list The TE policy has no valid segment lists</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Traffic Engineering policy operational state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up The te-policy is operationally up.</li> <li>down The te-policy is administratively down or no valid segment-list or due to other reasons.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state-change-count** *number*

<b>Description</b>	Traffic Engineering Policy operational state change count Operational status transition from up to down, down to up, etc all accounted under this counter
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">oper-state-change-count</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-state-change-count</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy-type** *keyword*

<b>Description</b>	Specifies the TE policy type  TE Policy can be of type sr-mpls-colored where label based segment-list or segment-lists constitute a candidate path and color with endpoint is used to configure a path. TE Policy can be of type uncolored in which case a single primary LSP can be backed by one or more secondary LSPs
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <b>policy-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">policy-type</a>
<b>Default</b>	sr-mpls-uncolored
<b>Options</b>	<ul style="list-style-type: none"> <li>• sr-mpls-colored</li> <li>• sr-mpls-uncolored</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **re-optimization-timer** (*number* | *keyword*)

<b>Description</b>	Re-optimizaion timer for the TE policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <b>re-optimization-timer</b> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">re-optimization-timer</a>
<b>Range</b>	30 to 10800
<b>Default</b>	30
<b>Units</b>	minutes
<b>Options</b>	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**retry-timer** *number*

<b>Description</b>	Time between TE policy re-establishment attempts after failure
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">retry-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">retry-timer</a>
<b>Range</b>	1 to 600
<b>Default</b>	30
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-list** [segment-list-index](#) *number*

<b>Description</b>	Enter the segment-list list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-list-index** *number*

<b>Description</b>	Index to enumerate the different segment lists of a TE policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i>
<b>Range</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable a segment list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>

<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic

<b>Description</b>	Configuration and state for dynamic segment lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic</a>
<b>Tree</b>	<a href="#">dynamic</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## path-algorithm *keyword*

<b>Description</b>	Path computation method
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic path-algorithm</a> <i>keyword</i>
<b>Tree</b>	<a href="#">path-algorithm</a>
<b>Default</b>	local-cspf
<b>Options</b>	<ul style="list-style-type: none"> <li>• local-cspf</li> <li>• pce</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## te-constraints

<b>Description</b>	Enter the te-constraints context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints</a>
<b>Tree</b>	<a href="#">te-constraints</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-metric-limit (*keyword | number*)

<b>Description</b>	The maximum acceptable delay for the segment-list used via local CSPF during path computation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints delay-metric-limit</a> ( <i>keyword   number</i> )
<b>Tree</b>	<a href="#">delay-metric-limit</a>
<b>Range</b>	1 to 16777215
<b>Default</b>	no-limit
<b>Options</b>	<ul style="list-style-type: none"> <li>no-limit</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### exclude-hop (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	Excluded IP addresses from path computation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints exclude-hop</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">exclude-hop</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### hop-limit *number*

<b>Description</b>	The maximum number of hops for the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints hop-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">hop-limit</a>

<b>Range</b>	2 to 255
<b>Default</b>	255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label-stack-reduction *boolean*

<b>Description</b>	Set to true to enable label stack reduction for local CSPF computed segment-lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints label-stack-reduction</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-stack-reduction</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-sr-protection *keyword*

<b>Description</b>	Protection offered for local CSPF computed segment-lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints local-sr-protection</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-sr-protection</a>
<b>Default</b>	preferred
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• preferred</li> <li>• mandated</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### metric-type *keyword*

<b>Description</b>	Metric type used for segment-list computation
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints metric-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">metric-type</a>
<b>Default</b>	igp
<b>Options</b>	<ul style="list-style-type: none"> <li>• igp</li> <li>• te</li> <li>• delay</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **secondary-srlg** *boolean*

<b>Description</b>	Set to to true to consider SRLG for secondary and standby segment list of uncolored type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints secondary-srlg</a> <i>boolean</i>
<b>Tree</b>	<a href="#">secondary-srlg</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **segment-depth**

<b>Description</b>	Configuration for the maximum number of SIDs/segments
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints segment-depth</a>
<b>Tree</b>	<a href="#">segment-depth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-limit** *number*

<b>Description</b>	The maximum number of segments in the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints segment-depth segment-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-limit</a>
<b>Range</b>	1 to 14
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entropy-label-transmit** *boolean*

<b>Description</b>	True if an entropy label is being inserted after the labels of this segment list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">entropy-label-transmit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-transmit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**explicit-path** *reference*

<b>Description</b>	Enter the explicit-path context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">explicit-path</a> <i>reference</i>
<b>Tree</b>	<a href="#">explicit-path</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies explicit-paths path explicit-path-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-reason** *identityref*

<b>Description</b>	The reason why the segment list is invalid. One of the following values:
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">failed-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">failed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">path-computation-request-timeout</a> Path computation request timed out</li> <li>• <a href="#">path-computation-no-route</a> No valid route is returned for path computation request</li> <li>• <a href="#">no-resources-available</a> Required resources are depleted, not enough resources to establish the requested segment-list</li> <li>• <a href="#">path-computation-bad-node</a> Path computation failure due to a resolution issue of one or more of the hops</li> <li>• <a href="#">path-computation-routing-loop</a> Path computation failure due to routing loop</li> <li>• <a href="#">unknown</a> Segment-list is down due to unknown reason</li> <li>• <a href="#">path-computation-no-route-owner</a> Path computation failure as none of the IGP instances had a valid route to one of the hops</li> <li>• <a href="#">path-computation-hop-limit-exceeded</a> Path computation failure due to hop limit. No path within the hop limit constraint configured</li> <li>• <a href="#">srlg-not-disjoint</a> SRLG is shared with primary segment-list and there is no other viable path with dispersed SRLG</li> <li>• <a href="#">srlg-not-computed-path</a> SRLG is not applicable, as primary segment-list has no applicable SRLG for path computation</li> <li>• <a href="#">srlg-primary-segment-list-down</a> SRLG is not applicable, as primary segment-list is down</li> <li>• <a href="#">unresolved-first-segment</a> The router is unable to resolve the first SID (MPLS label value) into one or more outgoing interface(s) and next-hop(s)</li> <li>• <a href="#">fib-add-pending</a> Segment-list is kept down, when adding next-hop into the FIB</li> <li>• <a href="#">fib-add-failed</a> FIB has failed to add the next-hop group. Next-hop group represents a group of next-hops for valid segment-lists under a TE-policy</li> </ul>

- maximum-label-stack-depth-exceeded  
The resolution of the named path requires more labels than supported by the datapath.
- pce-update-with-empty-ero  
PCE update has empty Explicit Route Object (EROs)
- segment-list-admin-down  
Segment-list is administratively down
- ipv4-hops-in-ipv6-path  
IPv4 and IPv6 hops are mixed in explicit path
- ipv6-hops-in-ipv4-path  
IPv6 and IPv4 hops are mixed in explicit path
- sid-hops-in-ip-path  
SID (label-based) and IP hops are mixed in explicit path
- sid-hops-with-invalid-path-computation  
SID hops (labeled hops) with path computation local-cspf/pcep is not allowed
- policy-down  
Traffic engineering policy is down
- pce-association-conflict  
PCE-association conflict
- retry-on-config-change  
Segment-list retry attempted due to config change
- clear-command  
Segment-list retry attempted due to manual clear command
- secondary-segment-list  
Secondary type segment-list, Primary is always preferred when available
- bfd-down  
BFD is reported down
- te-rtr-id-not-configured  
TE router ID config is missing
- pce-down  
PCE is unavailable
- pcc-down  
PCC is unavailable
- pce-error  
PCE response has error or timed-out
- pcc-error

- PCC responded with error
- delay-metric-limit-exceeded
- Segment-list delay metric limit exceeded

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-state *keyword*

<b>Description</b>	Forwarding state of the segment-list, tells about the activeness of segment-list in the data-path. active - enabled for forwarding traffic in data-path, inactive - programmed in data-path, not enabled for forwarding, could be standby or waiting for sBFD to come up, backup - enabled as a backup for currently active segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">forwarding-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> <li>• backup</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-oper-state-change *string*

<b>Description</b>	Time elapsed since the last operational state change for the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

<b>Description</b>	Segment list operational state
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up The segment-list is operationally up.</li> <li>• down The segment-list is operationally down</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state-change-count** *number*

<b>Description</b>	Traffic Engineering Policy segment-list operational state change count Operational status transition from up to down, down to up, etc all accounted under this counter
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">oper-state-change-count</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-state-change-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pce-control** *boolean*

<b>Description</b>	Set to true for a PCE controlled segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">pce-control</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pce-control</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pce-report** *boolean*

<b>Description</b>	seto to true to enable reporting of the segment-list to the PCE
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">pce-report</a> <i>boolean</i>

<b>Tree</b>	<a href="#">pce-report</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## priority

<b>Description</b>	Configure setup and hold priorities to be conveyed to the PCE for preemption purposes
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hold-priority *number*

<b>Description</b>	Hold priority of a TE policy in relation to preemption action
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">priority</a> <a href="#">hold-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## setup-priority *number*

<b>Description</b>	Setup priority of a TE policy in relation to preemption action
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">priority</a> <a href="#">setup-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">setup-priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-list-preference *number*

**Description** Preference value of this segment-list  
For an sr-mpls-uncolored TE policy one standby segment list is preferred over another if it has a lower preference value. The implicit default value is 100.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy policy-name](#) *string* [segment-list segment-list-index](#) *number* [segment-list-preference](#) *number*

**Tree** [segment-list-preference](#)

**Range** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-list-type *keyword*

**Description** Segment-list type: primary, standby or secondary  
Standby is programmed in datapath, consumes resources and is ready for a failover any time. Secondary is programmed upon failure of the previous active

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy policy-name](#) *string* [segment-list segment-list-index](#) *number* [segment-list-type](#) *keyword*

**Tree** [segment-list-type](#)

**Options**

- primary
- secondary
- standby

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tag-set *reference*

**Description** Tag set to associate with an sr-mpls-uncolored TE policy

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy policy-name](#) *string* [tag-set](#) *reference*

<b>Tree</b>	<a href="#">tag-set</a>
<b>Reference</b>	<a href="#">routing-policy tag-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on 7250 IXR, 7220 IXR, and 7730 SXR

## policy-database

<b>Description</b>	Traffic Engineering Policy Database
<b>Context</b>	<a href="#">network-instance name string traffic-engineering-policies policy-database</a>
<b>Tree</b>	<a href="#">policy-database</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## active-te-policies *number*

<b>Description</b>	Number of active Traffic Engineering Policies
<b>Context</b>	<a href="#">network-instance name string traffic-engineering-policies policy-database active-te-policies number</a>
<b>Tree</b>	<a href="#">active-te-policies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sr-uncolored

<b>Description</b>	Uncolored Traffic Engineering Policy Paths. Also referred to as SR-TE LSPs
<b>Context</b>	<a href="#">network-instance name string traffic-engineering-policies policy-database sr-uncolored</a>
<b>Tree</b>	<a href="#">sr-uncolored</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy [policy-name string protocol-origin keyword](#)

<b>Description</b>	Enter the Uncolored Traffic Engineering Policy Path list instance Also referred to as SR-TE LSP list
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy-name** *string*

<b>Description</b>	Name of Uncolored Traffic Engineering Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol-origin** *keyword*

<b>Description</b>	Uncolored Traffic Engineering Policy, origination source. The method Policy path is computed. This list includes Path Computation Engine, explicitly configured paths, etc.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>pcep</code> PCEP used as signalling mechanism for the candidate path</li> <li>• <code>bgp</code> BGP used as signalling mechanism for the candidate path</li> <li>• <code>local</code> Management interface used for candidate path instantiation</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **active-segment-list-index** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy active segment-list index
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">active-segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">active-segment-list-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## binding-sid

<b>Description</b>	Identifier that opaquely represents the Uncolored Traffic Engineering Policy (a.k.a. SR-TE LSP) to upstream routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">binding-sid</a>
<b>Tree</b>	<a href="#">binding-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls-label *number*

<b>Description</b>	MPLS label that represents the Uncolored Traffic Engineering Policy to upstream routers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">binding-sid</a> <a href="#">mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-time *string*

<b>Description</b>	Uncolored Traffic Engineering Policy creation time
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">created-time</a> <i>string</i>
<b>Tree</b>	<a href="#">created-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **endpoint** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Uncolored Traffic Engineering Policy endpoint IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword endpoint</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">endpoint</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **head-end** (*ipv4-address-unicast* | *ipv6-address-unicast-without-local*)

<b>Description</b>	Uncolored Traffic Engineering Policy headend IP address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword head-end</a> ( <i>ipv4-address-unicast</i>   <i>ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">head-end</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-oper-state-change** *string*

<b>Description</b>	Time elapsed since the last operational state change for the Traffic Engineering Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword last-oper-state-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maintenance**

<b>Description</b>	Maintenance context for TE Policy, hold and wait timers, sBFD, revertive behavior and alike available under this context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">maintenance</a>
<b>Tree</b>	<a href="#">maintenance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maintenance-policy** *string*

<b>Description</b>	The maintenance policy to use with the TE policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">maintenance</a> <a href="#">maintenance-policy</a> <i>string</i>
<b>Tree</b>	<a href="#">maintenance-policy</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy metric
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason** *identityref*

<b>Description</b>	The reason why the Traffic Engineering policy is operationally down. One of the following values:
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword oper-down-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>te-policy-admin-disabled The TE policy is administratively disabled</li> <li>te-policy-no-valid-segment-list The TE policy has no valid segment lists</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Traffic Engineering policy operational state.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up The te-policy is operationally up.</li> <li>down The te-policy is administratively down or no valid segment-list or due to other reasons.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state-change-count** *number*

<b>Description</b>	Traffic Engineering Policy operational state change count Operational status transition from up to down, down to up, etc all accounted under this counter
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword oper-state-change-count</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-state-change-count</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy-type** *keyword*

**Description** Uncolored Traffic Engineering Policy type

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [policy-database](#) [sr-uncolored](#) [policy](#) [policy-name](#) *string* [protocol-origin](#) *keyword* [policy-type](#) *keyword*

**Tree** [policy-type](#)

**Options**

- sr-mpls-colored
- sr-mpls-uncolored

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **segment-list** [segment-list-index](#) *number*

**Description** Enter the segment-list list instance

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [policy-database](#) [sr-uncolored](#) [policy](#) [policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list](#) [segment-list-index](#) *number*

**Tree** [segment-list](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **segment-list-index** *number*

**Description** Index to enumerate the different segment lists.

**Context** [network-instance name](#) *string* [traffic-engineering-policies](#) [policy-database](#) [sr-uncolored](#) [policy](#) [policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list](#) [segment-list-index](#) *number*

**Range** 1 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bfd**

<b>Description</b>	Enter the bfd context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">bfd</a>
<b>Tree</b>	<a href="#">bfd</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bfd-state** *keyword*

<b>Description</b>	The current state of the BFD session on the LSP path.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">bfd</a> <a href="#">bfd-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">bfd-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-applicable</li> <li>• down</li> <li>• up</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bfd-wait-for-up-expiry** *string*

<b>Description</b>	The time in seconds left to wait for the bfd session to be up.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">bfd</a> <a href="#">bfd-wait-for-up-expiry</a> <i>string</i>
<b>Tree</b>	<a href="#">bfd-wait-for-up-expiry</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bfd-wait-for-up-timer** *number*

<b>Description</b>	Specifies a wait-for-up timer value when seamless-bfd is enabled  This timer takes effect if BFD does not come up, or BFD goes from up to down. The timer is started when BFD is first enabled on a segment-list or BFD transitions from up to down. When the timer expires if BFD is not yet come up, then the path is torn down by removing it from the TTM and the PI and the retry timer is started.  The default is 3 seconds.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword</a> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">bfd</a> <a href="#">bfd-wait-for-up-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">bfd-wait-for-up-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hold-down-timer** *number*

<b>Description</b>	Specifies a hold-down timer value when seamless-bfd is enabled  The timer is started when the number of S-BFD sessions that are up drops below the threshold. The TE-policy path is not considered to be up again until the hold-down timer has expired and the number of S-BFD sessions that are up equals or exceeds the threshold. A grace period after session down such that sBFD session flaps does not impact active path.  The default is 3 seconds.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword</a> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">bfd</a> <a href="#">hold-down-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-down-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hold-down-timer-expiry** *string*

<b>Description</b>	Time remaining on seamless-bfd hold down timer
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">bfd hold-down-timer-expiry</a> <i>string</i>
<b>Tree</b>	<a href="#">hold-down-timer-expiry</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## computed-segments

<b>Description</b>	Enter the computed-segments context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments</a>
<b>Tree</b>	<a href="#">computed-segments</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## segment [segment-index](#) *number*

<b>Description</b>	Enter the segment list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment</a> <a href="#">segment-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## segment-index *number*

<b>Description</b>	Index to enumerate the different segments in a segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment</a> <a href="#">segment-index</a> <i>number</i>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop-type *keyword*

**Description** Hop type.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [computed-segments segment segment-index](#) *number* **hop-type** *keyword*

**Tree** [hop-type](#)

**Options**

- ipv4
- ipv6
- unnum

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-address (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

**Description** IP Address for this hop.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [computed-segments segment segment-index](#) *number* **ip-address** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

**Tree** [ip-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### is-loose *boolean*

**Description** Indicates if this tunnel hop is loose.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [computed-segments segment segment-index](#) *number* **is-loose** *boolean*

**Tree** [is-loose](#)

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **router-id** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The value of router ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment segment-index</a> <i>number</i> <b>router-id</b> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">router-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sid-type** *keyword*

<b>Description</b>	Type of Segment Identifier (SID).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment segment-index</a> <i>number</i> <b>sid-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">sid-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-applicable</li> <li>• node-sid</li> <li>• adjacency-sid</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sid-value**

<b>Description</b>	Enter the sid-value context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment segment-index</a> <i>number</i> <b>sid-value</b>
<b>Tree</b>	<a href="#">sid-value</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-label** *number*

<b>Description</b>	Label recorded for this hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment segment-index</a> <i>number</i> <a href="#">sid-value mpls-label</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unnumbered-if-id** *number*

<b>Description</b>	The value of unnumbered interface identifier of this hop.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">computed-segments segment segment-index</a> <i>number</i> <a href="#">unnumbered-if-id</a> <i>number</i>
<b>Tree</b>	<a href="#">unnumbered-if-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delay-metric** *number*

<b>Description</b>	Delay metric of given Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">delay-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">delay-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dynamic**

<b>Description</b>	Dynamic Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic</a>
<b>Tree</b>	<a href="#">dynamic</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-algorithm** *keyword*

<b>Description</b>	Algorithm used for computation of the Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic path-algorithm</a> <i>keyword</i>
<b>Tree</b>	<a href="#">path-algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">local-cspf</a></li> <li>• <a href="#">pce</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-constraints**

<b>Description</b>	Traffic Engineering constraints for dynamic segment-lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints</a>
<b>Tree</b>	<a href="#">te-constraints</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-metric-limit** (*keyword | number*)

<b>Description</b>	The maximum acceptable delay for the segment-list used via local CSPF during path computation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints delay-metric-limit</a> ( <i>keyword   number</i> )
<b>Tree</b>	<a href="#">delay-metric-limit</a>
<b>Range</b>	1 to 16777215
<b>Options</b>	<ul style="list-style-type: none"> <li>no-limit</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**exclude-hop** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)

<b>Description</b>	Excluded IP addresses from path computation for the given Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints exclude-hop</a> ( <i>ipv4-address-unicast   ipv6-address-unicast-without-local</i> )
<b>Tree</b>	<a href="#">exclude-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hop-limit** *number*

<b>Description</b>	Hop limit constraint used for computation of the Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints hop-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">hop-limit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-stack-reduction** *boolean*

<b>Description</b>	If label stack reduction is enabled for the given Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints label-stack-reduction</a> <i>boolean</i>
<b>Tree</b>	<a href="#">label-stack-reduction</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-sr-protection** *keyword*

<b>Description</b>	Protection offered for local CSPF computed segment-lists
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints local-sr-protection</a> <i>keyword</i>
<b>Tree</b>	<a href="#">local-sr-protection</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• preferred</li> <li>• mandated</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**metric-type** *keyword*

<b>Description</b>	Metric type used for segment-list computation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">dynamic te-constraints metric-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">metric-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• igp</li> <li>• te</li> <li>• delay</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### secondary-srlg *boolean*

**Description** If SRLG constraints are taken into account while computing Secondary Segment List

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [dynamic te-constraints secondary-srlg](#) *boolean*

**Tree** [secondary-srlg](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-depth

**Description** Configuration for the maximum number of SIDs/segments

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [dynamic te-constraints segment-depth](#)

**Tree** [segment-depth](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-limit *number*

**Description** The maximum number of segments in the segment-list

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [dynamic te-constraints segment-depth segment-limit](#) *number*

**Tree** [segment-limit](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entropy-label-transmit** *boolean*

<b>Description</b>	True if an entropy label is being inserted after the labels of this segment list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">entropy-label-transmit</a> <i>boolean</i>
<b>Tree</b>	<a href="#">entropy-label-transmit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**explicit-path** *string*

<b>Description</b>	Explicit-path used for instantiating Segment List under Traffic Engineering Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">explicit-path</a> <i>string</i>
<b>Tree</b>	<a href="#">explicit-path</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-reason** *identityref*

<b>Description</b>	The reason why the segment list is invalid. One of the following values:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">failed-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">failed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>path-computation-request-timeout Path computation request timed out</li> <li>path-computation-no-route No valid route is returned for path computation request</li> <li>no-resources-available Required resources are depleted, not enough resources to establish the requested segment-list</li> </ul>



- path-computation-bad-node  
Path computation failure due to a resolution issue of one or more of the hops
- path-computation-routing-loop  
Path computation failure due to routing loop
- unknown  
Segment-list is down due to unknown reason
- path-computation-no-route-owner  
Path computation failure as none of the IGP instances had a valid route to one of the hops
- path-computation-hop-limit-exceeded  
Path computation failure due to hop limit. No path within the hop limit constraint configured
- srlg-not-disjoint  
SRLG is shared with primary segment-list and there is no other viable path with dispersed SRLG
- srlg-not-computed-path  
SRLG is not applicable, as primary segment-list has no applicable SRLG for path computation
- srlg-primary-segment-list-down  
SRLG is not applicable, as primary segment-list is down
- unresolved-first-segment  
The router is unable to resolve the first SID (MPLS label value) into one or more outgoing interface(s) and next-hop(s)
- fib-add-pending  
Segment-list is kept down, when adding next-hop into the FIB
- fib-add-failed  
FIB has failed to add the next-hop group. Next-hop group represents a group of next-hops for valid segment-lists under a TE-policy
- maximum-label-stack-depth-exceeded  
The resolution of the named path requires more labels than supported by the datapath.
- pce-update-with-empty-ero  
PCE update has empty Explicit Route Object (EROs)
- segment-list-admin-down  
Segment-list is administratively down
- ipv4-hops-in-ipv6-path  
IPv4 and IPv6 hops are mixed in explicit path
- ipv6-hops-in-ipv4-path

IPv6 and IPv4 hops are mixed in explicit path

- sid-hops-in-ip-path

SID (label-based) and IP hops are mixed in explicit path

- sid-hops-with-invalid-path-computation

SID hops (labeled hops) with path computation local-cspf/pcep is not allowed

- policy-down

Traffic engineering policy is down

- pce-association-conflict

PCE-association conflict

- retry-on-config-change

Segment-list retry attempted due to config change

- clear-command

Segment-list retry attempted due to manual clear command

- secondary-segment-list

Secondary type segment-list, Primary is always preferred when available

- bfd-down

BFD is reported down

- te-rtr-id-not-configured

TE router ID config is missing

- pce-down

PCE is unavailable

- pcc-down

PCC is unavailable

- pce-error

PCE response has error or timed-out

- pcc-error

PCC responded with error

- delay-metric-limit-exceeded

Segment-list delay metric limit exceeded

### Configurable

False

### Platforms

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-state** *keyword*

<b>Description</b>	Forwarding state of the segment-list, tells about the activeness of segment-list in the data-path. active - enabled for forwarding traffic in data-path, inactive - programmed in data-path, not enabled for forwarding, could be standby or waiting for sBFD to come up, backup - enabled as a backup for currently active segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <b>forwarding-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> <li>• backup</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**igp-metric** *number*

<b>Description</b>	IGP metric of given Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <b>igp-metric</b> <i>number</i>
<b>Tree</b>	<a href="#">igp-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-oper-state-change** *string*

<b>Description</b>	Time elapsed since the last operational state change for the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i> <b>last-oper-state-change</b> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-state-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-pce-update

**Description** Enter the last-pce-update context

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [last-pce-update](#)

**Tree** [last-pce-update](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## failure-reason *identityref*

**Description** Indicates the reason code for last MBB failure.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [last-pce-update failure-reason](#) *identityref*

**Tree** [failure-reason](#)

**Options**

- [path-computation-request-timeout](#)  
Path computation request timed out
- [path-computation-no-route](#)  
No valid route is returned for path computation request
- [no-resources-available](#)  
Required resources are depleted, not enough resources to establish the requested segment-list
- [path-computation-bad-node](#)  
Path computation failure due to a resolution issue of one or more of the hops
- [path-computation-routing-loop](#)  
Path computation failure due to routing loop
- [unknown](#)  
Segment-list is down due to unknown reason
- [path-computation-no-route-owner](#)  
Path computation failure as none of the IGP instances had a valid route to one of the hops
- [path-computation-hop-limit-exceeded](#)

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Path computation failure due to hop limit. No path within the hop limit constraint configured

- srlg-not-disjoint

SRLG is shared with primary segment-list and there is no other viable path with dispersed SRLG

- srlg-not-computed-path

SRLG is not applicable, as primary segment-list has no applicable SRLG for path computation

- srlg-primary-segment-list-down

SRLG is not applicable, as primary segment-list is down

- unresolved-first-segment

The router is unable to resolve the first SID (MPLS label value) into one or more outgoing interface(s) and next-hop(s)

- fib-add-pending

Segment-list is kept down, when adding next-hop into the FIB

- fib-add-failed

FIB has failed to add the next-hop group. Next-hop group represents a group of next-hops for valid segment-lists under a TE-policy

- maximum-label-stack-depth-exceeded

The resolution of the named path requires more labels than supported by the datapath.

- pce-update-with-empty-ero

PCE update has empty Explicit Route Object (EROs)

- segment-list-admin-down

Segment-list is administratively down

- ipv4-hops-in-ipv6-path

IPv4 and IPv6 hops are mixed in explicit path

- ipv6-hops-in-ipv4-path

IPv6 and IPv4 hops are mixed in explicit path

- sid-hops-in-ip-path

SID (label-based) and IP hops are mixed in explicit path

- sid-hops-with-invalid-path-computation

SID hops (labeled hops) with path computation local-cspf/pcep is not allowed

- policy-down

Traffic engineering policy is down

- pce-association-conflict

PCE-association conflict

- `retry-on-config-change`  
Segment-list retry attempted due to config change
- `clear-command`  
Segment-list retry attempted due to manual clear command
- `secondary-segment-list`  
Secondary type segment-list, Primary is always preferred when available
- `bfd-down`  
BFD is reported down
- `te-rtr-id-not-configured`  
TE router ID config is missing
- `pce-down`  
PCE is unavailable
- `pcc-down`  
PCC is unavailable
- `pce-error`  
PCE response has error or timed-out
- `pcc-error`  
PCC responded with error
- `delay-metric-limit-exceeded`  
Segment-list delay metric limit exceeded

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state keyword****Description**

Indicates whether the last update was successful or failed.

**Context**

[network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [last-pce-update state](#) *keyword*

**Tree**[state](#)**Options**

- `success`
- `failure`

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time** *string*

<b>Description</b>	Indicates the system time when the last update occurred.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword</a> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">last-pce-update time</a> <i>string</i>
<b>Tree</b>	<a href="#">time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**update-id** *number*

<b>Description</b>	Indicates the last update ID which was processed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword</a> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">last-pce-update update-id</a> <i>number</i>
<b>Tree</b>	<a href="#">update-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-reoptimization-attempt** *string*

<b>Description</b>	Time elapsed since last path re-optimization attempt on the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword</a> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">last-reoptimization-attempt</a> <i>string</i>
<b>Tree</b>	<a href="#">last-reoptimization-attempt</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-retry-attempt** *string*

<b>Description</b>	Time elapsed since the last retry attempt to re-established the segment-list
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">last-retry-attempt</a> <i>string</i>
<b>Tree</b>	<a href="#">last-retry-attempt</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Isp-id number**

<b>Description</b>	Unique internal identifier of segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">Isp-id</a> <i>number</i>
<b>Tree</b>	<a href="#">Isp-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mbb**

<b>Description</b>	The make-before-break operational information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">mbb</a>
<b>Tree</b>	<a href="#">mbb</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-progress-mbb**

<b>Description</b>	The in progress make-before-break operational information.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">mbb in-progress-mbb</a>
<b>Tree</b>	<a href="#">in-progress-mbb</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### start-time *string*

**Description** Indicates the system time when the in-progress MBB started.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [mbb in-progress-mbb start-time](#) *string*

**Tree** [start-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### type *keyword*

**Description** Indicates the type of the make-before-break (MBB) that is in progress.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [mbb in-progress-mbb type](#) *keyword*

**Tree** [type](#)

**Options**

- none
- timer-based-reoptimization
- manual-resignal
- pce-update

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-mbb

**Description** The last make-before-break operational information.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [mbb last-mbb](#)

**Tree** [last-mbb](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-time** *string*

**Description** Specifies the system time when the last MBB ended.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [mbb last-mbb end-time](#) *string*

**Tree** [end-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **failed-reason** *identityref*

**Description** Indicates the reason code for last MBB failure.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin keyword segment-list segment-list-index](#) *number* [mbb last-mbb failed-reason](#) *identityref*

**Tree** [failed-reason](#)

**Options**

- [path-computation-request-timeout](#)  
Path computation request timed out
- [path-computation-no-route](#)  
No valid route is returned for path computation request
- [no-resources-available](#)  
Required resources are depleted, not enough resources to establish the requested segment-list
- [path-computation-bad-node](#)  
Path computation failure due to a resolution issue of one or more of the hops
- [path-computation-routing-loop](#)  
Path computation failure due to routing loop
- [unknown](#)  
Segment-list is down due to unknown reason
- [path-computation-no-route-owner](#)  
Path computation failure as none of the IGP instances had a valid route to one of the hops

- path-computation-hop-limit-exceeded  
Path computation failure due to hop limit. No path within the hop limit constraint configured
- srlg-not-disjoint  
SRLG is shared with primary segment-list and there is no other viable path with dispersed SRLG
- srlg-not-computed-path  
SRLG is not applicable, as primary segment-list has no applicable SRLG for path computation
- srlg-primary-segment-list-down  
SRLG is not applicable, as primary segment-list is down
- unresolved-first-segment  
The router is unable to resolve the first SID (MPLS label value) into one or more outgoing interface(s) and next-hop(s)
- fib-add-pending  
Segment-list is kept down, when adding next-hop into the FIB
- fib-add-failed  
FIB has failed to add the next-hop group. Next-hop group represents a group of next-hops for valid segment-lists under a TE-policy
- maximum-label-stack-depth-exceeded  
The resolution of the named path requires more labels than supported by the datapath.
- pce-update-with-empty-ero  
PCE update has empty Explicit Route Object (EROs)
- segment-list-admin-down  
Segment-list is administratively down
- ipv4-hops-in-ipv6-path  
IPv4 and IPv6 hops are mixed in explicit path
- ipv6-hops-in-ipv4-path  
IPv6 and IPv4 hops are mixed in explicit path
- sid-hops-in-ip-path  
SID (label-based) and IP hops are mixed in explicit path
- sid-hops-with-invalid-path-computation  
SID hops (labeled hops) with path computation local-cspf/pcep is not allowed
- policy-down  
Traffic engineering policy is down
- pce-association-conflict

	<ul style="list-style-type: none"> <li>PCE-association conflict</li> <li>• retry-on-config-change Segment-list retry attempted due to config change</li> <li>• clear-command Segment-list retry attempted due to manual clear command</li> <li>• secondary-segment-list Secondary type segment-list, Primary is always preferred when available</li> <li>• bfd-down BFD is reported down</li> <li>• te-rtr-id-not-configured TE router ID config is missing</li> <li>• pce-down PCE is unavailable</li> <li>• pcc-down PCC is unavailable</li> <li>• pce-error PCE response has error or timed-out</li> <li>• pcc-error PCC responded with error</li> <li>• delay-metric-limit-exceeded Segment-list delay metric limit exceeded</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>state keyword</b>	
<b>Description</b>	Indicates whether the last make-before-break was successful, failed or was not required as path was already optimal.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list segment-list-index</a> <i>number</i> <a href="#">mbb last-mbb state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• success</li> <li>• failure</li> <li>• path-optimal</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **type** *keyword*

**Description** Indicates the type of the make-before-break (MBB) that is in progress.

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [mbb last-mbb type](#) *keyword*

**Tree** [type](#)

**Options**

- none
- timer-based-reoptimization
- manual-resignal
- pce-update

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **metric** *number*

**Description** Metric of a given Segment List

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [metric](#) *number*

**Tree** [metric](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-reoptimization-attempt** *string*

**Description** Time remaining for next path re-optimization attempt on the segment-list

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [next-reoptimization-attempt](#) *string*

**Tree** [next-reoptimization-attempt](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-retry-attempt *string*

**Description** Time remaining for next retry attempt to re-established the segment-list

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [next-retry-attempt](#) *string*

**Tree** [next-retry-attempt](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state *keyword*

**Description** Segment list operational state

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [oper-state](#) *keyword*

**Tree** [oper-state](#)

**Options**

- up  
The segment-list is operationally up.
- down  
The segment-list is operationally down

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-state-change-count *number*

**Description** Traffic Engineering Policy segment-list operational state change count  
Operational status transition from up to down, down to up, etc all accounted under this counter

**Context** [network-instance name](#) *string* [traffic-engineering-policies policy-database sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword* [segment-list segment-list-index](#) *number* [oper-state-change-count](#) *number*

**Tree** [oper-state-change-count](#)

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **path-computation-requests** *number*

<b>Description</b>	Number of path computation requests made for the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <b>path-computation-requests</b> <i>number</i>
<b>Tree</b>	<a href="#">path-computation-requests</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pce-control** *boolean*

<b>Description</b>	PCE Control status for Traffic Engineering Policy Segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <b>pce-control</b> <i>boolean</i>
<b>Tree</b>	<a href="#">pce-control</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pce-report** *boolean*

<b>Description</b>	PCE Reporting for Traffic Engineering Policy Segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <b>pce-report</b> <i>boolean</i>
<b>Tree</b>	<a href="#">pce-report</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**retry-attempts** *number*

<b>Description</b>	Number of unsuccessful attempts made to signal the segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">retry-attempts</a> <i>number</i>
<b>Tree</b>	<a href="#">retry-attempts</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**revert-timer** *number*

<b>Description</b>	Revert timer for the segment-list.  Timer till a revert to primary/best path after it is recovered from a failure. In case of uncolored te-policy, applies to primary segment-list and in case of colored te-policy applies to best candidate path.  The default is 0 seconds.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">revert-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">revert-timer</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**revert-timer-expiry** *string*

<b>Description</b>	Time remaining on revert-timer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">revert-timer-expiry</a> <i>string</i>
<b>Tree</b>	<a href="#">revert-timer-expiry</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**segment-list-preference** *number*

<b>Description</b>	Segment List preference for a given list under Traffic Engineering Policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">segment-list-preference</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list-preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-list-type** *keyword*

<b>Description</b>	Segment-list type: primary, standby or secondary Standby is programmed in datapath, consumes resources and is ready for a failover any time. Secondary is programmed upon failure of the previous active
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">segment-list-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">segment-list-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• primary</li> <li>• secondary</li> <li>• standby</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-metric** *number*

<b>Description</b>	TE metric of given Segment List
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy-database sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">te-metric</a> <i>number</i>
<b>Tree</b>	<a href="#">te-metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-list-count** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy segment-list count
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list-count</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag-set** *reference*

<b>Description</b>	Tag-set associated with this uncolored te-policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">tag-set name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on 7250 IXR, 7220 IXR, and 7730 SXR

**tunnel-id** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy unique tunnel identifier
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">sr-uncolored policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">tunnel-id</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-te-policies** *number*

<b>Description</b>	Number of total Traffic Engineering Policies (irrespective of the operational state)
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy-database</a> <a href="#">total-te-policies</a> <i>number</i>

<b>Tree</b>	<a href="#">total-te-policies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-table

<b>Description</b>	Enter the tunnel-table context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a>
<b>Tree</b>	<a href="#">tunnel-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## ipv4

<b>Description</b>	The container for the IPv4 tunnels associated with the network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv4</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## active-tunnels *number*

<b>Description</b>	The total number of tunnels, belonging to this address family, that are active.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv4</a> <a href="#">statistics</a> <a href="#">active-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">active-tunnels</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **inactive-tunnels** *number*

**Description** The total number of tunnels, belonging to this address family, that are inactive (not programmed).

**Context** [network-instance name](#) *string* [tunnel-table ipv4 statistics inactive-tunnels](#) *number*

**Tree** [inactive-tunnels](#)

**Configurable** False

**Platforms** Supported on all platforms

### **total-tunnels** *number*

**Description** The total number of tunnels, active and inactive, belonging to this address family

**Context** [network-instance name](#) *string* [tunnel-table ipv4 statistics total-tunnels](#) *number*

**Tree** [total-tunnels](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **tunnel** [ipv4-prefix](#) *string* [type](#) *identityref* [owner](#) *string* [id](#) *number*

**Description** Enter the tunnel list instance

**Context** [network-instance name](#) *string* [tunnel-table ipv4 tunnel ipv4-prefix](#) *string* [type](#) *identityref* [owner](#) *string* [id](#) *number*

**Tree** [tunnel](#)

**Configurable** False

**Platforms** Supported on all platforms

### **ipv4-prefix** *string*

**Description** The IPv4 prefix associated with the endpoint of the tunnel.

**Context** [network-instance name](#) *string* [tunnel-table ipv4 tunnel ipv4-prefix](#) *string* [type](#) *identityref* [owner](#) *string* [id](#) *number*

**Configurable** False

**Platforms** Supported on all platforms

### **type** *identityref*

**Description** The tunnel (encapsulation) type

**Context** [network-instance name](#) *string* [tunnel-table ipv4 tunnel ipv4-prefix](#) *string* [type identityref](#) [owner](#) *string* [id](#) *number*

**Options**

- **ip-in-ip**  
Tunnels with IP-in-IP encapsulation
- **gre**  
Tunnels with GRE encapsulation
- **sr-isis**  
Segment routing using MPLS dataplane, programmed by IS-IS
- **sr-ospfv2**  
Segment routing using MPLS dataplane, programmed by OSPFv2
- **sr-ospfv3**  
Segment routing using MPLS dataplane, programmed by OSPFv3
- **te-policy-sr-mpls-colored**  
Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color
- **te-policy-sr-mpls-uncolored**  
Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.
- **vxlan**  
Tunnels based on VXLAN encapsulation

**Configurable** False

**Platforms** Supported on all platforms

### **owner** *string*

**Description** The name of the application that submitted the tunnel to TTM

**Context** [network-instance name](#) *string* [tunnel-table ipv4 tunnel ipv4-prefix](#) *string* [type identityref](#) [owner](#) *string* [id](#) *number*

**Configurable** False

**Platforms** Supported on all platforms

**id number**

<b>Description</b>	An owner-assigned index value that is unique for each of the tunnels terminating at a particular prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner string id number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**encapsulation-type keyword**

<b>Description</b>	The type of encapsulation used by the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner string id number encapsulation-type keyword</i>
<b>Tree</b>	<a href="#">encapsulation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fib-programming**

<b>Description</b>	Container for state related to the FIB programming of the tunnel
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner string id number fib-programming</i>
<b>Tree</b>	<a href="#">fib-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**not-programmed-reason keyword**

<b>Description</b>	The reason why the tunnel is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner string id number fib-programming not-programmed-reason keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• out-of-tunnel-resources</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**status** *keyword*

<b>Description</b>	The status of the tunnel programming
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref</i> <a href="#">owner</a> <i>string</i> <a href="#">id number</a> <a href="#">fib-programming status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active The tunnel is active and programmed into the datapath.</li> <li>• inactive The tunnel is inactive and not programmed into the datapath.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**internal-tags** *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref</i> <a href="#">owner</a> <i>string</i> <a href="#">id number</a> <a href="#">internal-tags</a> <i>string</i>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

**ip-in-ip**

<b>Description</b>	Enter the ip-in-ip context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref</i> <a href="#">owner</a> <i>string</i> <a href="#">id number</a> <a href="#">ip-in-ip</a>
<b>Tree</b>	<a href="#">ip-in-ip</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **destination-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the destination of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner</i> <i>string id number ip-in-ip destination-address</i> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the source of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner</i> <i>string id number ip-in-ip source-address</i> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-app-update** *string*

<b>Description</b>	The date and time of the last update of this tunnel by the owning application or protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string type identityref owner</i> <i>string id number last-app-update</i> <i>string</i>
<b>Tree</b>	<a href="#">last-app-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **metric** *number*

<b>Description</b>	The metric of the tunnel.
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<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv4 tunnel ipv4-prefix string type identityref owner string id number metric number</a>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### next-hop-group *reference*

<b>Description</b>	Leaf reference to a next-hop-group that has the direct next-hops towards the tunnel far-end
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv4 tunnel ipv4-prefix string type identityref owner string id number next-hop-group reference</a>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name string route-table next-hop-group index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### preference *number*

<b>Description</b>	The tunnel table preference.
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv4 tunnel ipv4-prefix string type identityref owner string id number preference number</a>
<b>Tree</b>	<a href="#">preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### vxlan

<b>Description</b>	Enter the vxlan context
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv4 tunnel ipv4-prefix string type identityref owner string id number vxlan</a>
<b>Tree</b>	<a href="#">vxlan</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**destination-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number vxlan destination-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**destination-udp-port** *number*

<b>Description</b>	The destination UDP port number written into the outer IP/UDP header of VXLAN packets associated with this tunnel and originated by this router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number vxlan destination-udp-port</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-udp-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the local VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number vxlan source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**time-to-live** *number*

<b>Description</b>	The Time To Live (TTL) value written into the outer IP header of VXLAN packets associated with this tunnel and originated by this router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel ipv4-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number vxlan time-to-live</a> <i>number</i>
<b>Tree</b>	<a href="#">time-to-live</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tunnel-summary

<b>Description</b>	Tunnel summary information
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel-summary</a>
<b>Tree</b>	<a href="#">tunnel-summary</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tunnel-type [type identityref](#)

<b>Description</b>	Enter the tunnel-type list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel-summary tunnel-type</a> <a href="#">type identityref</a>
<b>Tree</b>	<a href="#">tunnel-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## [type identityref](#)

<b>Description</b>	Tunneling encapsulation format
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4 tunnel-summary tunnel-type</a> <a href="#">type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ip-in-ip</a> Tunnels with IP-in-IP encapsulation</li> <li>• <a href="#">gre</a> Tunnels with GRE encapsulation</li> <li>• <a href="#">sr-isis</a> Segment routing using MPLS dataplane, programmed by IS-IS</li> <li>• <a href="#">sr-ospfv2</a> Segment routing using MPLS dataplane, programmed by OSPFv2</li> <li>• <a href="#">sr-ospfv3</a> Segment routing using MPLS dataplane, programmed by OSPFv3</li> <li>• <a href="#">te-policy-sr-mpls-colored</a></li> </ul>

Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color

- te-policy-sr-mpls-uncolored

Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.

- vxlan

Tunnels based on VXLAN encapsulation

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **active-tunnels** *number*

<b>Description</b>	The total number of tunnels, using this encapsulation type, that are active.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4</a> <a href="#">tunnel-summary</a> <a href="#">tunnel-type type</a> <a href="#">identityref active-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">active-tunnels</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **inactive-tunnels** *number*

<b>Description</b>	The total number of tunnels, using this encapsulation type, that are inactive (not programmed).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4</a> <a href="#">tunnel-summary</a> <a href="#">tunnel-type type</a> <a href="#">identityref inactive-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">inactive-tunnels</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-tunnels** *number*

<b>Description</b>	The total number of tunnels, active and inactive, using this encapsulation type.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv4</a> <a href="#">tunnel-summary</a> <a href="#">tunnel-type type</a> <a href="#">identityref total-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">total-tunnels</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

## ipv6

**Description** The container for the IPv6 tunnels associated with the network instance.

**Context** [network-instance name](#) *string* [tunnel-table](#) [ipv6](#)

**Tree** [ipv6](#)

**Configurable** False

**Platforms** Supported on all platforms

## statistics

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [tunnel-table](#) [ipv6](#) [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** Supported on all platforms

## active-tunnels *number*

**Description** The total number of tunnels, belonging to this address family, that are active.

**Context** [network-instance name](#) *string* [tunnel-table](#) [ipv6](#) [statistics](#) [active-tunnels](#) *number*

**Tree** [active-tunnels](#)

**Configurable** False

**Platforms** Supported on all platforms

## inactive-tunnels *number*

**Description** The total number of tunnels, belonging to this address family, that are inactive (not programmed).

**Context** [network-instance name](#) *string* [tunnel-table](#) [ipv6](#) [statistics](#) [inactive-tunnels](#) *number*

**Tree** [inactive-tunnels](#)

**Configurable** False

**Platforms** Supported on all platforms

**total-tunnels** *number*

<b>Description</b>	The total number of tunnels, active and inactive, belonging to this address family
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6 statistics</a> <a href="#">total-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">total-tunnels</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tunnel** [ipv6-prefix](#) *string* [type](#) [identityref](#) [owner](#) *string* [id](#) *number*

<b>Description</b>	Enter the tunnel list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6 tunnel</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">type</a> <a href="#">identityref</a> <a href="#">owner</a> <i>string</i> <a href="#">id</a> <i>number</i>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ipv6-prefix** *string*

<b>Description</b>	The IPv6 prefix associated with the endpoint of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6 tunnel</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">type</a> <a href="#">identityref</a> <a href="#">owner</a> <i>string</i> <a href="#">id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** [identityref](#)

<b>Description</b>	The tunnel (encapsulation) type
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6 tunnel</a> <a href="#">ipv6-prefix</a> <i>string</i> <a href="#">type</a> <a href="#">identityref</a> <a href="#">owner</a> <i>string</i> <a href="#">id</a> <i>number</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ip-in-ip Tunnels with IP-in-IP encapsulation</li> <li>• gre Tunnels with GRE encapsulation</li> </ul>

- `sr-isis`  
Segment routing using MPLS dataplane, programmed by IS-IS
- `sr-ospfv2`  
Segment routing using MPLS dataplane, programmed by OSPFv2
- `sr-ospfv3`  
Segment routing using MPLS dataplane, programmed by OSPFv3
- `te-policy-sr-mpls-colored`  
Tunnel setup with `sr-mpls-colored` type TE-Policy. Labeled Traffic Engineering Policy with color
- `te-policy-sr-mpls-uncolored`  
Tunnel setup with `sr-mpls-uncolored` type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.
- `vxlan`  
Tunnels based on VXLAN encapsulation

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **owner string**

<b>Description</b>	The name of the application that submitted the tunnel to TTM
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **id number**

<b>Description</b>	An owner-assigned index value that is unique for each of the tunnels terminating at a particular prefix.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **encapsulation-type keyword**

<b>Description</b>	The type of encapsulation used by the tunnel.
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <i>type</i> <a href="#">identityref owner</a> <i>string</i> <i>id</i> <i>number</i> <a href="#">encapsulation-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">encapsulation-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• mpls</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## fib-programming

<b>Description</b>	Container for state related to the FIB programming of the tunnel
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <i>type</i> <a href="#">identityref owner</a> <i>string</i> <i>id</i> <i>number</i> <a href="#">fib-programming</a>
<b>Tree</b>	<a href="#">fib-programming</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## not-programmed-reason *keyword*

<b>Description</b>	The reason why the tunnel is not programmed
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <i>type</i> <a href="#">identityref owner</a> <i>string</i> <i>id</i> <i>number</i> <a href="#">fib-programming not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• out-of-tunnel-resources</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## status *keyword*

<b>Description</b>	The status of the tunnel programming
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <i>type</i> <a href="#">identityref owner</a> <i>string</i> <i>id</i> <i>number</i> <a href="#">fib-programming status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active The tunnel is active and programmed into the datapath.</li> <li>• inactive</li> </ul>



The tunnel is inactive and not programmed into the datapath.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### internal-tags *string*

<b>Description</b>	Internal route tag written in the route/tunnel tables or BGP rib The internal-tag value is shown with the format 'type-string = hex-value-string'. For example:
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel ipv6-prefix string type identityref owner string id number internal-tags string</a>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	2

### ip-in-ip

<b>Description</b>	Enter the ip-in-ip context
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel ipv6-prefix string type identityref owner string id number ip-in-ip</a>
<b>Tree</b>	<a href="#">ip-in-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### destination-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the destination of the tunnel.
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel ipv6-prefix string type identityref owner string id number ip-in-ip destination-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the source of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number ip-in-ip source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-app-update** *string*

<b>Description</b>	The date and time of the last update of this tunnel by the owning application or protocol.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number last-app-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-app-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**metric** *number*

<b>Description</b>	The metric of the tunnel.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number metric</a> <i>number</i>
<b>Tree</b>	<a href="#">metric</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group** *reference*

<b>Description</b>	Leaf reference to a next-hop-group that has the direct next-hops towards the tunnel far-end
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string</i> <a href="#">type identityref owner</a> <i>string</i> <a href="#">id number next-hop-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table next-hop-group index</a> <i>number</i>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### preference *number*

<b>Description</b>	The tunnel table preference.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string type identityref owner string id number preference number</i>
<b>Tree</b>	<a href="#">preference</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### vxlan

<b>Description</b>	Enter the vxlan context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string type identityref owner string id number vxlan</i>
<b>Tree</b>	<a href="#">vxlan</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### destination-address (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string type identityref owner string id number vxlan destination-address (ipv4-address   ipv6-address)</i>
<b>Tree</b>	<a href="#">destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### destination-udp-port *number*

<b>Description</b>	The destination UDP port number written into the outer IP/UDP header of VXLAN packets associated with this tunnel and originated by this router.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table ipv6 tunnel ipv6-prefix</a> <i>string type identityref owner string id number vxlan destination-udp-port number</i>

<b>Tree</b>	<a href="#">destination-udp-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### source-address (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address that identifies the local VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel ipv6-prefix string type identityref owner string id number vxlan source-address (<i>ipv4-address   ipv6-address</i>)</a>
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### time-to-live *number*

<b>Description</b>	The Time To Live (TTL) value written into the outer IP header of VXLAN packets associated with this tunnel and originated by this router.
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel ipv6-prefix string type identityref owner string id number vxlan time-to-live number</a>
<b>Tree</b>	<a href="#">time-to-live</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### tunnel-summary

<b>Description</b>	Tunnel summary information
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel-summary</a>
<b>Tree</b>	<a href="#">tunnel-summary</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### tunnel-type *type identityref*

<b>Description</b>	Enter the tunnel-type list instance
<b>Context</b>	<a href="#">network-instance name string tunnel-table ipv6 tunnel-summary tunnel-type type identityref</a>

<b>Tree</b>	<a href="#">tunnel-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *identityref*

<b>Description</b>	Tunneling encapsulation format
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6</a> <a href="#">tunnel-summary</a> <a href="#">tunnel-type</a> <a href="#">type identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ip-in-ip</a> Tunnels with IP-in-IP encapsulation</li> <li>• <a href="#">gre</a> Tunnels with GRE encapsulation</li> <li>• <a href="#">sr-isis</a> Segment routing using MPLS dataplane, programmed by IS-IS</li> <li>• <a href="#">sr-ospfv2</a> Segment routing using MPLS dataplane, programmed by OSPFv2</li> <li>• <a href="#">sr-ospfv3</a> Segment routing using MPLS dataplane, programmed by OSPFv3</li> <li>• <a href="#">te-policy-sr-mpls-colored</a> Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color</li> <li>• <a href="#">te-policy-sr-mpls-uncolored</a> Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.</li> <li>• <a href="#">vxlan</a> Tunnels based on VXLAN encapsulation</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-tunnels** *number*

<b>Description</b>	The total number of tunnels, using this encapsulation type, that are active.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">tunnel-table</a> <a href="#">ipv6</a> <a href="#">tunnel-summary</a> <a href="#">tunnel-type</a> <a href="#">type identityref</a> <a href="#">active-tunnels</a> <i>number</i>
<b>Tree</b>	<a href="#">active-tunnels</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **inactive-tunnels** *number*

**Description** The total number of tunnels, using this encapsulation type, that are inactive (not programmed).

**Context** [network-instance name](#) *string* [tunnel-table ipv6 tunnel-summary tunnel-type type](#) [identityref](#) **inactive-tunnels** *number*

**Tree** [inactive-tunnels](#)

**Configurable** False

**Platforms** Supported on all platforms

### **total-tunnels** *number*

**Description** The total number of tunnels, active and inactive, using this encapsulation type.

**Context** [network-instance name](#) *string* [tunnel-table ipv6 tunnel-summary tunnel-type type](#) [identityref](#) **total-tunnels** *number*

**Tree** [total-tunnels](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **type** *identityref*

**Description** The type of network instance. The value of this leaf indicates the type of forwarding entries that should be supported by this network instance

**Context** [network-instance name](#) *string* [type](#) [identityref](#)

**Tree** [type](#)

**Default** default

**Options**

- host  
A special routing instances that refers to the hosts network instance (i.e. the network namespace of PID 1)
- default  
A special routing instance which acts as the 'default' routing instance for a network device.
- ip-vrf  
A private Layer 3 only routing instance.

- mac-vrf  
A private Layer 2 only switching instance.
- vpws  
A private Layer 2 point-to-point instance.

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## udp

<b>Description</b>	State for UDP datagrams routed using the route tables of this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp</a>
<b>Tree</b>	<a href="#">udp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## listening-application [local-address](#) (*ipv4-address* | *ipv6-address*) [local-port](#) *number*

<b>Description</b>	List of applications that are listening on a particular UDP port bound to the network-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp</a> <a href="#">listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i>
<b>Tree</b>	<a href="#">listening-application</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## [local-address](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The local IP address accepted by the application. An all-zeroes value for the <i>ipv4-address</i> means that any IPv4 address is accepted. An all-zeroes value for the <i>ipv6-address</i> means that any IPv6 address is accepted.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp</a> <a href="#">listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">local-port</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**local-port** *number*

<b>Description</b>	The local port number accepted by the application.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">local-port</a> <i>number</i>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**process-id** *number*

<b>Description</b>	The process ID of the application that owns the socket.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp listening-application</a> <a href="#">local-address</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">local-port</a> <i>number</i> <a href="#">process-id</a> <i>number</i>
<b>Tree</b>	<a href="#">process-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ignored-multicast-packets** *number*

<b>Description</b>	The total number of ignored multicast UDP datagrams.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp</a> <a href="#">statistics</a> <a href="#">ignored-multicast-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">ignored-multicast-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**in-checksum-errors** *number*

<b>Description</b>	Increased when a received UDP packet has an invalid checksum.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics</a> <a href="#">in-checksum-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">in-checksum-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-error-packets** *number*

<b>Description</b>	The total number of received UDP datagrams that could not be delivered for reasons other than the lack of an application at the destination port.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics</a> <a href="#">in-error-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-error-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-no-open-ports-packets** *number*

<b>Description</b>	The total number of received UDP datagrams for which there was no application at the destination port.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics</a> <a href="#">in-no-open-ports-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-no-open-ports-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-packets** *number*

<b>Description</b>	The total number of UDP datagrams delivered to UDP users.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics</a> <a href="#">in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**out-packets** *number*

<b>Description</b>	The total number of UDP datagrams sent from this network instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**receive-buffer-errors** *number*

<b>Description</b>	Increased when memory cannot be allocated to process an incoming UDP packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics receive-buffer-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">receive-buffer-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**send-buffer-errors** *number*

<b>Description</b>	Increased when memory cannot be allocated to send a UDP packet.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">udp statistics send-buffer-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">send-buffer-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**vxlan-interface** [name](#) *string*

<b>Description</b>	List of vxlan-interfaces used by this network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">vxlan-interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">vxlan-interface</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	1

**name** *string*

<b>Description</b>	Identifier of vxlan-interface used in this network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">vxlan-interface name</a> <i>string</i>
<b>String Length</b>	8 to 17
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-down-reason** *keyword*

<b>Description</b>	The reason for the vxlan-interface being down in the network-instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">vxlan-interface name</a> <i>string</i> <a href="#">oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• vxlan-tunnel-down</li> <li>• net-inst-down</li> <li>• vxlan-if-default-net-inst-source-address-missing</li> <li>• vxlan-if-default-net-inst-source-if-down</li> <li>• vrf-type-mismatch</li> <li>• no-mcid</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-state** *keyword*

<b>Description</b>	The operational state of this vxlan-interface.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">vxlan-interface name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up</li> </ul>

- Component or process is operational
- down
- Component or process is not operational
- empty
- Component slot is empty
- downloading
- Component is downloading image into memory
- booting
- Component is booting downloaded image
- starting
- Component image operational, application processes starting
- failed
- Component or process has failed
- synchronizing
- Component is currently being synchronized
- upgrading
- Component is currently being upgraded
- low-power
- Component is offline due to insufficient system power
- degraded
- Component or process is in a degraded state
- warm-reboot
- Component or process is currently warm rebooting
- This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
- Component or process is currently waiting
- This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## 7 oam

```

oam
+ ethcfm
- cfm-stack-table
- interface
  - interface interface string level number direction keyword
  - association-id string
  - defects keyword
  - domain-id string
  - mac-address string
  - mep-id number
- subinterface
  - subinterface subinterface string primary-vlan (number |
keyword) level number direction keyword
  - association-id string
  - defects keyword
  - domain-id string
  - mac-address string
  - mep-id number
  - subinterface-type string
+ domain domain-id string
+ association association-id string
  - association-auto-discovered-meps mep-id number
  + association-format keyword
  + association-meps mep-id number
  + ccm-hold-time
  + delay-timeout number
  + ccm-interval keyword
  + ma-name
  + icc-value string
  + id string
  + name string
  + number number
  + vid number
  + mep mep-id reference
  + admin-state keyword
  + ccm-ltm-priority number
  + continuity-check
    - active-defects keyword
  + ccm-local-fault
    + action keyword
    - ccm-sequence-error-count number
  + ccm-transmit keyword
  - highest-priority-defect-found keyword
  - last-cross-connect-ccm binary
  - last-error-ccm binary
  + lowest-fault-priority-defect keyword
  - sent-interface-status keyword
  - sent-port-status keyword
  - sent-remote-defect-indicator boolean
  + direction keyword
  + interface-ref
    + interface reference
    + subinterface reference
  - linktrace
    - latest-run
      - destination-mac-address string

```

```

- end-time string
- priority number
- remote-mep-id number
- reply reply-order number
- chassis-id (mac-address | string | binary)
- chassis-id-subtype (number | keyword)
- egress-action keyword
- egress-mac string
- egress-port-id
  - port-id-subtype keyword
  - value (mac-address | string | binary)
- forwarded boolean
- ingress-action keyword
- ingress-mac string
- ingress-port-id
  - port-id-subtype keyword
  - value (mac-address | string | binary)
- last-egress-identifier
  - integer number
  - mac-address string
- ltr-relay keyword
- management-address string
- management-address-domain string
- next-egress-identifier
  - integer number
  - mac-address string
- reply-ttl number
- terminal-mep boolean
- start-time string
- test-status keyword
- transaction-id number
- transmit-ltm-flags bits
- ttl number
- next-transaction-number number
- status keyword
- unexpected-ltr-received number
- Loopback
- multicast-latest-run
  - data-length number
  - end-time string
  - interval keyword
  - priority number
  - remote-mep-mac remote-mac-address string
  - sequence-number number received-index number
  - start-time string
  - statistics
    - received-packets number
    - received-unexpected-sequence-number number
    - transmitted-packets number
  - test-status keyword
- next-sequence-number number
- status keyword
- unicast-latest-run
  - data-length number
  - destination-mac-address string
  - end-time string
  - interval keyword
  - priority number
  - remote-mep-id number
  - sequence-number number
  - start-time string
  - statistics
    - packet-loss decimal-number
    - received-bad-msdu number

```

```

    - received-in-order number
    - received-out-of-order number
    - received-unexpected-sequence-number number
    - sent-packets number
    - test-status keyword
+ mac-address
+ custom-address string
+ custom-mac-pool
+   index number
+   name reference
+ system-mac-pool-index number
- opcode opcode-name keyword
- received number
- transmitted number
- remote-mep remote-mep-id number
- auto-discovered boolean
- chassis-id (mac-address | string | binary)
- chassis-id-subtype (number | keyword)
- interface-status-tlv keyword
- mac-address string
- management-address string
- management-address-domain string
- port-status-tlv keyword
- receiving-ccm boolean
- remote-defect-indicator boolean
- remote-mep-failed-ok-time number
- remote-mep-state keyword
+ network-instance
+ name reference
+ remote-mep-auto-discovery
+   admin-state keyword
+   aging-timer (number | keyword)
+   sender-id-permission-type keyword
+ domain-format keyword
+ level number
+ md-name
+   dns string
+   mac string
+   name string
+   two-octet-int number
- learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-
id number
- remote-mac-address string
- stale-flag boolean
+ mac-allocation
+ custom-mac-pool name string
+   count number
+   highest-index-in-use number
+   mac-address index number mac-address string
+   starting-mac string
- interface name string
- forwarding-complex number
- linecard number
- mep domain-id string association-id string mep-id number
-   custom-mac-pool-name string
-   index number
-   mac-address string
-   mac-allocated-type keyword
-   subinterface string
+ mode keyword
- network-instance name string
- subinterface name string
-   mep domain-id string association-id string mep-id number
-   custom-mac-pool-name string

```

```

- duplicate-mac boolean
- index number
- mac-address string
- mac-allocated-type keyword
- system-mac-pool
  - count number
  - mac-address index number mac-address string
  - starting-mac string
+ sender-id
+ chassis-local-name string
+ chassis-type keyword
- statistics
  - error-discards number
  - opcode opcode-name keyword
    - received number
    - transmitted number
  - receive-congestion-drops number
  - receive-count number
  - transmit-congestion-drops number
  - transmit-count number
+ ippm
+ source-udp-port-pools
  + port port-number number
  + application-assignment keyword
  - in-use boolean
+ link-measurement
+ interface name string
  - aggregate-newest-index number
  - destination-ip-auto-assigned boolean
  - detectable-transmit-error keyword
  + dynamic-measurement
    + link-measurement-template reference
    + stamp
    + ipv4
      + admin-state keyword
      + destination-ip string
      + source-ip string
    + ipv6
      + admin-state keyword
      + destination-ip string
      + source-ip string
  - in-use-destination-udp-port number
  - in-use-source-udp-port number
+ interface-ref
  + interface reference
  + subinterface reference
  - last-reported-dynamic-delay (number | keyword)
  - oper-state keyword
  - operational-destination-address (ipv4-address | ipv6-address)
  - operational-failure keyword
  - operational-source-address (ipv4-address | ipv6-address)
  - report-timestamp string
  - report-triggered-by keyword
  - reporting boolean
  - sample-newest-index number
  - source-ip-auto-assigned boolean
  - stamp-session-identifier number
  - statistics
    - aggregate-sample-window
      - index index number
      - average number
      - end-timestamp-utc string
      - integrity boolean
      - maximum number

```



```

    - minimum number
    - result number
    - sample-window-count number
    - window-state keyword
  - sample-window
    - index index number
    - average number
    - duplicate-packet-count number
    - end-timestamp-utc string
    - error-count number
    - integrity boolean
    - maximum number
    - minimum number
    - received-packets number
    - result number
    - stamp-malformed-flag-count number
    - stamp-unrecognized-flag-count number
    - transmitted-packets number
    - window-state keyword
    - zero-or-negative-delay-count number
+ measurement-template template-name string
+ admin-state keyword
+ aggregate-sample-window
+ multiplier number
+ threshold
  + absolute number
  + relative number
+ window-integrity number
+ delay keyword
+ description string
+ interval number
+ last-reported-dynamic-delay-hold number
+ reporting boolean
+ sample-window
+ multiplier number
+ threshold
  + absolute number
  + relative number
+ window-integrity number
+ stamp
+ destination-udp-port number
+ dscp (number | keyword)
+ forwarding-class reference
+ ipv6-destination-discovery
  + admin-state keyword
  + discovery-interval number
  + discovery-timer number
  + update-interval number
+ pad-tlv-size number
+ profile keyword
+ return-path
  + link boolean
+ source-udp-port number
+ ttl number
+ unidirectional-measurement keyword
- lsp-ping
- ldp
- fec prefix (ipv4-prefix | ipv6-prefix)
- session-id id number
- path-destination
  - ip-address (ipv4-address | ipv6-address)
  - next-hop (ipv4-address | ipv6-address)
  - subinterface string
- sequence sequence-id number

```

```

- out-interface string
- probe-size number
- reply
  - mpls-ttl number
  - received boolean
  - reply-sender (ipv4-address | ipv6-address)
  - return-code keyword
  - return-subcode number
  - round-trip-time number
  - udp-data-length number
- request-sent boolean
- send-failure-reason keyword
- statistics
  - round-trip-time
    - average number
    - maximum number
    - minimum number
    - standard-deviation number
  - test-active boolean
- sr-isis
- prefix-sid prefix (ipv4-prefix | ipv6-prefix)
- session-id id number
- path-destination
  - ip-address (ipv4-address | ipv6-address)
  - next-hop (ipv4-address | ipv6-address)
  - subinterface string
- sequence sequence-id number
- out-interface string
- probe-size number
- reply
  - mpls-ttl number
  - received boolean
  - reply-sender (ipv4-address | ipv6-address)
  - return-code keyword
  - return-subcode number
  - round-trip-time number
  - udp-data-length number
- request-sent boolean
- send-failure-reason keyword
- statistics
  - round-trip-time
    - average number
    - maximum number
    - minimum number
    - standard-deviation number
  - test-active boolean
- te-policy
- sr-uncolored
- policy policy-name string protocol-origin keyword
- session-id id number
- path-destination
  - ip-address (ipv4-address | ipv6-address)
  - next-hop (ipv4-address | ipv6-address)
  - subinterface string
- sequence sequence-id number
- out-interface string
- probe-size number
- reply
  - mpls-ttl number
  - received boolean
  - reply-sender (ipv4-address | ipv6-address)
  - return-code keyword
  - return-subcode number
  - round-trip-time number

```

```

    - udp-data-length number
    - request-sent boolean
    - send-failure-reason keyword
  - statistics
    - round-trip-time
      - average number
      - maximum number
      - minimum number
      - standard-deviation number
    - test-active boolean
- lsp-trace
- ldp
  - fec prefix (ipv4-prefix | ipv6-prefix)
  - session-id id number
  - hop hop-index number
  - probe probe-index number
  - downstream-detailed-mapping id number
  - address-type keyword
  - downstream-interface-address (ipv4-address | ipv6-address)
  - downstream-router-address (ipv4-address | ipv6-address)
  - mpls-label index number
    - label (number | keyword)
    - protocol keyword
  - mtu number
  - last-probe-send-failure-reason keyword
  - probe-size number
  - probes-sent number
  - reply
    - mpls-ttl number
    - received boolean
    - reply-sender (ipv4-address | ipv6-address)
    - return-code keyword
    - return-subcode number
    - round-trip-time number
    - udp-data-length number
  - path-destination
    - ip-address (ipv4-address | ipv6-address)
    - next-hop (ipv4-address | ipv6-address)
    - subinterface string
  - test-active boolean
- sr-isis
  - prefix-sid prefix (ipv4-prefix | ipv6-prefix)
  - session-id id number
  - hop hop-index number
  - probe probe-index number
  - downstream-detailed-mapping id number
  - address-type keyword
  - downstream-interface-address (ipv4-address | ipv6-address)
  - downstream-router-address (ipv4-address | ipv6-address)
  - mpls-label index number
    - label (number | keyword)
    - protocol keyword
  - mtu number
  - last-probe-send-failure-reason keyword
  - probe-size number
  - probes-sent number
  - reply
    - mpls-ttl number
    - received boolean
    - reply-sender (ipv4-address | ipv6-address)
    - return-code keyword
    - return-subcode number
    - round-trip-time number
    - udp-data-length number

```

```

- path-destination
- ip-address (ipv4-address | ipv6-address)
- next-hop (ipv4-address | ipv6-address)
- subinterface string
- test-active boolean
- te-policy
- sr-uncolored
- policy policy-name string protocol-origin keyword
- session-id id number
- hop hop-index number
- probe probe-index number
- downstream-detailed-mapping id number
- address-type keyword
- downstream-interface-address (ipv4-address | ipv6-address)
- downstream-router-address (ipv4-address | ipv6-address)
- mpls-label index number
- label (number | keyword)
- protocol keyword
- mtu number
- last-probe-send-failure-reason keyword
- probe-size number
- probes-sent number
- reply
- mpls-ttl number
- received boolean
- reply-sender (ipv4-address | ipv6-address)
- return-code keyword
- return-subcode number
- round-trip-time number
- udp-data-length number
- path-destination
- ip-address (ipv4-address | ipv6-address)
- next-hop (ipv4-address | ipv6-address)
- subinterface string
- test-active boolean
+ performance-monitoring
+ ethcfm
+ delay
+ bin-group bin-group-name string
+ admin-state keyword
+ bin-type bin-metric keyword
+ bin bin-number number
+ lower-bound number
+ delay-event direction keyword
+ clear-threshold number
+ exclude-lowest-bin number
+ lowest-bin number
+ raise-threshold number
+ exclude-from-avg direction keyword
+ bins string
+ description string
- reference-count number
+ loss
+ loss-events-template loss-events-template-name string
+ avg-flr-event direction keyword
+ clear-threshold decimal-number
+ raise-threshold decimal-number
+ chli-event direction keyword
+ clear-threshold number
+ raise-threshold number
+ description string
+ hli-event direction keyword
+ clear-threshold number
+ raise-threshold number

```

```

- reference-count number
+ unavailability-event direction keyword
+ clear-threshold number
+ raise-threshold number
+ undetermined-availability-event direction keyword
+ clear-threshold number
+ raise-threshold number
+ undetermined-unavailability-event direction keyword
+ clear-threshold number
+ raise-threshold number
+ session session-name string
+ description string
+ eth-cfm-single-ended-dmm-test
+ admin-state keyword
+ bin-group reference
- bin-group-binning keyword
+ data-tlv-size number
- delay-events bin-metric keyword direction keyword
- last-tca-time string
- oper-state keyword
- detected-tx-error keyword
+ interval keyword
- measurement-result mi-ro-type keyword
- index index number
- elapsed-time number
- oper-state keyword
- start-time string
- statistics
- bin-type bin-metric keyword
- backward
- average number
- maximum number
- minimum number
- bin bin-number number
- backward-measurements number
- forward-measurements number
- round-trip-measurements number
- forward
- average number
- maximum number
- minimum number
- round-trip
- average number
- maximum number
- minimum number
- frames-received number
- frames-transmitted number
- suspect-status boolean
- newest-index number
- oper-state keyword
+ test-duration number
+ test-id (number | keyword)
- test-id-in-use number
+ eth-cfm-single-ended-slm-test
+ admin-state keyword
+ data-tlv-size number
- detected-tx-error keyword
+ flr-threshold number
+ hli-force-count boolean
+ interval keyword
+ loss-event reference
- loss-events loss-metric keyword direction keyword
- last-tca-time string
- oper-state keyword

```

```

- measurement-result mi-ro-type keyword
- index index number
- elapsed-time number
- oper-state keyword
- start-time string
- statistics
  - backward
    - available number
    - average-frame-loss-ratio number
    - consecutive-high-loss-intervals number
    - high-loss-intervals number
    - in-loss number
    - maximum-frame-loss-ratio number
    - minimum-frame-loss-ratio number
    - unavailable number
    - undetermined-available number
    - undetermined-unavailable number
  - forward
    - available number
    - average-frame-loss-ratio number
    - consecutive-high-loss-intervals number
    - high-loss-intervals number
    - maximum-frame-loss-ratio number
    - minimum-frame-loss-ratio number
    - out-loss number
    - unavailable number
    - undetermined-available number
    - undetermined-unavailable number
  - frames-received number
  - frames-transmitted number
  - suspect-status boolean
- newest-index number
- oper-state keyword
+ test-duration number
+ test-id (number | keyword)
- test-id-in-use number
+ timing
  + chli-threshold number
  + consecutive-delta-t number
  + frames-per-delta-t number
+ measurement-interval mi-duration keyword
+ boundary-type keyword
+ clock-offset number
+ intervals-stored number
+ threshold-alerts
  + delay-event keyword
  + loss-event keyword
+ priority number
+ session-type keyword
+ source
  + association-id reference
  + domain-id reference
  + mep-id reference
+ target (unicast-mac-address | number)
+ ip
  + delay
    + bin-group bin-group-name string
    + admin-state keyword
    + bin-type bin-metric keyword
    + bin bin-number number
    + lower-bound number
    + delay-event direction keyword
    + clear-threshold number
    + exclude-lowest-bin number

```

```

    + lowest-bin number
    + raise-threshold number
  + exclude-from-avg direction keyword
    + bins string
  + description string
  - reference-count number
+ loss
+ loss-events-template loss-events-template-name string
+ avg-flr-event direction keyword
  + clear-threshold decimal-number
  + raise-threshold decimal-number
+ chli-event direction keyword
  + clear-threshold number
  + raise-threshold number
+ description string
+ hli-event direction keyword
  + clear-threshold number
  + raise-threshold number
- reference-count number
+ unavailability-event direction keyword
  + clear-threshold number
  + raise-threshold number
+ undetermined-availability-event direction keyword
  + clear-threshold number
  + raise-threshold number
+ undetermined-unavailability-event direction keyword
  + clear-threshold number
  + raise-threshold number
+ session session-name string
+ description string
+ destination-ip (ipv4-address | ipv6-address)
+ destination-udp-port number
+ dscp (number | keyword)
+ forwarding
  + interface-ref
    + interface reference
    + subinterface reference
  + next-hop (ipv4-address | ipv6-address)
+ forwarding-class reference
+ measurement-interval mi-duration keyword
  + boundary-type keyword
  + clock-offset number
  + intervals-stored number
  + threshold-alerts
    + delay-event keyword
    + loss-event keyword
+ network-instance reference
+ profile keyword
+ session-type keyword
+ source-ip (ipv4-address | ipv6-address)
+ source-udp-port number
- source-udp-port-in-use number
+ stamp
+ admin-state keyword
+ delay
  + bin-group reference
  - bin-group-binning keyword
  - delay-events bin-metric keyword direction keyword
    - last-tca-time string
    - oper-state keyword
  - measurement-result mi-ro-type keyword
    - index index number
    - elapsed-time number
    - oper-state keyword

```

```

- start-time string
- statistics
  - bin-type bin-metric keyword
    - backward
      - average number
      - maximum number
      - minimum number
    - bin bin-number number
      - backward-measurements number
      - forward-measurements number
      - round-trip-measurements number
    - forward
      - average number
      - maximum number
      - minimum number
    - round-trip
      - average number
      - maximum number
      - minimum number
  - frames-received number
  - frames-transmitted number
  - suspect-status boolean
  - newest-index number
- detected-tx-error keyword
+ interval keyword
+ loss
+ flr-threshold number
+ hli-force-count boolean
+ loss-event reference
- loss-events loss-metric keyword direction keyword
  - last-tca-time string
  - oper-state keyword
- measurement-result mi-ro-type keyword
  - index index number
  - elapsed-time number
  - oper-state keyword
  - start-time string
  - statistics
    - backward
      - available number
      - average-frame-loss-ratio number
      - consecutive-high-loss-intervals number
      - high-loss-intervals number
      - in-loss number
      - maximum-frame-loss-ratio number
      - minimum-frame-loss-ratio number
      - unavailable number
      - undetermined-available number
      - undetermined-unavailable number
    - forward
      - available number
      - average-frame-loss-ratio number
      - consecutive-high-loss-intervals number
      - high-loss-intervals number
      - maximum-frame-loss-ratio number
      - minimum-frame-loss-ratio number
      - out-loss number
      - unavailable number
      - undetermined-available number
      - undetermined-unavailable number
    - frames-received number
    - frames-transmitted number
  - suspect-status boolean
  - newest-index number

```



```

    + timing
      + chli-threshold number
      + consecutive-delta-t number
      + frames-per-delta-t number
    - oper-state keyword
  + pad-tlv-size number
  - stamp-session-identifier number
  - statistics
    - stamp-malformed-flag-received number
    - stamp-unrecognized-flag-received number
  + test-duration number
  + test-id (number | keyword)
  - test-id-in-use number
+ ttl number
+ service-activation-testhead
+ acceptance-criteria-template ac-template-name string
+ cir-threshold number
+ delay-threshold number
+ delay-var-threshold number
+ description string
+ loss-threshold decimal-number
+ loss-threshold-policing decimal-number
+ m-factor number
+ pir-threshold number
+ frame-size-template fs-template-name string
+ size-a number
+ size-b number
+ size-c number
+ size-d number
+ size-e number
+ size-f number
+ size-g number
+ size-h number
+ size-u number
+ results
+ service-test test-name string
- statistics
  - service-test test-name string test-run number
  - accounting-oper-state keyword
  - description string
  - oper-state keyword
  - service-stream stream-id number
  - acceptance-criteria-template string
  - cir-threshold number
  - delay-threshold number
  - delay-var-threshold number
  - description string
  - frame-mix
    - frame-size-template string
    - sequence string
  - frame-payload
  - data-pattern
    - repeat (hex-string | number)
  - ethernet
    - c-tag
      - discard-eligible boolean
      - dot1p number
    - destination-mac-address string
    - eth-cfm
      - source
        - association-id string
        - domain-id string
        - mep-id number
    - s-tag

```

```

- discard-eligible boolean
- dot1p number
- interface string
- interface-ref
- interface reference
- subinterface reference
- loss-threshold (decimal-number | keyword)
- loss-threshold-policing (decimal-number | keyword)
- m-factor number
- network-instance reference
- oper-state keyword
- pir-threshold number
- rate-cir number
- rate-pir number
- service-stream-completion-notification boolean
- size-a number
- size-b number
- size-c number
- size-d number
- size-e number
- size-f number
- size-g number
- size-h number
- size-u number
- source-mac-address string
- test-results test-type keyword
- measured-delay-avg number
- measured-delay-max number
- measured-delay-min number
- measured-delay-var-avg number
- measured-delay-var-max number
- measured-delay-var-min number
- measured-frame-loss-ratio decimal-number
- measured-frame-rx number
- measured-frame-tx number
- measured-throughput number
- oper-state keyword
- oper-status-delay keyword
- oper-status-delay-var keyword
- oper-status-frame-loss-ratio keyword
- oper-status-throughput keyword
- time-end (date-and-time | keyword)
- time-left number
- time-start (date-and-time | keyword)
- test-types
- cir boolean
- cir-pir boolean
- performance boolean
- policing boolean
- service-test-completion-notification boolean
- stream-run-type keyword
- test-duration
- cir
- minutes-seconds string
- cir-pir
- minutes-seconds string
- performance
- hours-minutes-seconds string
- policing
- minutes-seconds string
- time-end (date-and-time | keyword)
- time-start (date-and-time | keyword)
+ service-test test-name string
+ admin-state keyword

```

```

+ description string
+ service-stream stream-id number
+ acceptance-criteria-template reference
+ admin-state keyword
+ description string
+ frame-mix
+ frame-size-template reference
+ sequence string
+ frame-payload
+ data-pattern
+ repeat (hex-string | number)
+ ethernet
+ c-tag
+ discard-eligible boolean
+ dot1p number
+ dst-mac string
+ eth-cfm
+ source
+ association-id reference
+ domain-id reference
+ mep-id reference
+ s-tag
+ discard-eligible boolean
+ dot1p number
+ rate-cir number
+ rate-pir number
+ service-stream-completion-notification boolean
+ test-types
+ cir boolean
+ cir-pir boolean
+ performance boolean
+ policing boolean
+ service-test-completion-notification boolean
+ stream-run-type keyword
+ test-duration
+ cir
+ minutes-seconds string
+ cir-pir
+ minutes-seconds string
+ performance
+ hours-minutes-seconds string
+ policing
+ minutes-seconds string
+ stamp
+ session-reflector
+ inactivity-timer number
+ network-instance name reference
+ admin-state keyword
+ description string
+ ip-prefix ip-prefix (ipv4-prefix | ipv6-prefix)
- oper-state keyword
- statistics
- malformed-packet number
- packet-discards-source-destination-equal number
- prefix-match-failure number
- session-reflector-udp-port-registration-failure number
- test-frames-received number
- test-frames-sent number
- test-sessions number
- test-session-statistics session-sender-ip (ipv4-address | ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address | ipv6-address) session-reflector-udp number stamp-session-identifier number
- current-ref-wait number
- last-sequence-number-received number

```

```

- last-sequence-number-transmitted number
- malformed-tlv number
- test-frames-received number
- test-frames-sent number
+ udp-port number
- statistics
- packet-discards-on-reception number
- packet-discards-on-transmission number
- reflector-table-entries-full number
- reflectors-configured number
- reflectors-not-operational number
- reflectors-operational number
- session-reflector-not-found number
- test-frames-received number
- test-frames-sent number
- test-session-count number
+ twamp
+ server
+ network-instance name reference
+ admin-state keyword
+ client-connection prefix (ipv4-prefix | ipv6-prefix)
+ maximum-connections number
+ maximum-sessions number
- statistics
- control-connections-active number
- control-connections-rejected number
- test-packets-received number
- test-packets-transmitted number
- test-sessions-aborted number
- test-sessions-active number
- test-sessions-completed number
- test-sessions-rejected number
- control-connection client-ip (ipv4-address | ipv6-address) client-tcp-
port number server-ip (ipv4-address | ipv6-address) server-tcp-port number
- control-packet-dscp number
- selected-mode keyword
- state keyword
- statistics
- test-packets-received number
- test-packets-transmitted number
- test-sessions-aborted number
- test-sessions-active number
- test-sessions-completed number
- test-sessions-rejected number
+ control-packet-dscp (number | keyword)
+ description string
+ enforce-test-session-start-time boolean
+ maximum-connections number
+ maximum-sessions number
- modes keyword
- oper-state keyword
+ servwait number
- session-reflector
- test-session sender-ip (ipv4-address | ipv6-address) sender-udp-
port number reflector-ip (ipv4-address | ipv6-address) reflector-udp-port number
- last-sequence-number-received number
- last-sequence-number-transmitted number
- parent-connection-client-ip (ipv4-address | ipv6-address)
- parent-connection-client-tcp-port number
- parent-connection-server-ip (ipv4-address | ipv6-address)
- parent-connection-server-tcp-port number
- statistics
- test-packets-received number
- test-packets-transmitted number

```

```

- test-packet-dscp number
- test-session-id string
- statistics
- control-connections-active number
- control-connections-rejected number
- test-packets-received number
- test-packets-transmitted number
- test-sessions-aborted number
- test-sessions-active number
- test-sessions-completed number
- test-sessions-rejected number
- statistics
- dropped-connection-states
- active number
- idle number
- process-started number
- process-stop number
- process-tw-session number
- setup-wait number
- started number
- dropped-connections
- connection-timeout number
- control-command-not-valid number
- incorrect-stop-session-count number
- invalid-invalid-hmac number
- maximum-global-limit-exceed number
- maximum-prefix-limit-exceed number
- memory-allocation-error number
- message-send-error number
- no-client-prefix-match number
- no-internal-resource number
- non-zero-sid-in-client-control-message number
- tcp-connection-closed number
- tcp-connection-fatal-error number
- tcp-unexpected-event number
- unspecified-mode number
- unsupported-mode number
- dropped-test-packet
- arrived-before-start-time number
- incorrect-packet-size number
- incorrect-source-address number
- invalid-error-estimate number
- invalid-server-octets number
- invalid-symmetric-mbz number
- no-start-sessions number
- reply-error number
- rejected-session
- bad-type-p number
- client-source-ip-unreachable number
- duplicate-session number
- invalid-ip-address-version number
- maximum-global-session-exceed number
- maximum-prefix-session-exceed number
- no-internal-resource number
- non-local-ip-destination number
- non-zero-mbz-value number
- non-zero-session-sender-sid number
- padding-too-big number
- refwait-timeout number
- timeout-too-large number
- udp-port-in-use number

```

## 7.1 oam Descriptions

### oam

<b>Description</b>	Enclosing container for OAM
<b>Context</b>	<a href="#">oam</a>
<b>Tree</b>	<a href="#">oam</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ethcfm

<b>Description</b>	OAM configuration and operational data for the management of Ethernet (ETH-CFM)
<b>Context</b>	<a href="#">oam ethcfm</a>
<b>Tree</b>	<a href="#">ethcfm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cfm-stack-table

<b>Description</b>	The cfm-stack-table provides an overview of CFM MEP state in a single view
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table</a>
<b>Tree</b>	<a href="#">cfm-stack-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface

<b>Description</b>	Enter the interface context
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface** *interface string level number direction keyword*

**Description** List of interfaces that have CFM configured and the association CFM operational state

**Context** [oam ethcfm cfm-stack-table interface interface interface string level number direction keyword](#)

**Tree** [interface](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface** *string*

**Description** Interface name

**Context** [oam ethcfm cfm-stack-table interface interface interface string level number direction keyword](#)

**String Length** 3 to 20

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **level** *number*

**Description** The maintenance domain level

**Context** [oam ethcfm cfm-stack-table interface interface interface string level number direction keyword](#)

**Range** 0 to 7

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

**Description** The direction the MEP faces

If 'down' the MEP sends CFM PDUs away from the MAC Relay Entity. If 'up' the MEP sends CFM PDUs towards the MAC Relay Entity.

<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface</a> <i>string level number direction keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• down</li> <li>• up</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id** *string*

<b>Description</b>	A uniquely assigned administrative name used to identify a maintenance association
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface</a> <i>string level number direction keyword association-id string</i>
<b>Tree</b>	<a href="#">association-id</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**defects** *keyword*

<b>Description</b>	Current received defects for the local MEP
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface</a> <i>string level number direction keyword defects keyword</i>
<b>Tree</b>	<a href="#">defects</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• rdi-ccm</li> <li>• mac-status</li> <li>• remote-ccm</li> <li>• error-ccm</li> <li>• xcon-ccm</li> <li>• ais</li> <li>• csf-ais</li> <li>• csf-rdi</li> <li>• csf-los</li> <li>• eth-ed</li> </ul>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**domain-id string**

<b>Description</b>	A uniquely assigned administrative name used to identify a maintenance domain
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface string level number direction keyword domain-id string</a>
<b>Tree</b>	<a href="#">domain-id</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	MAC address of the Management Point
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface string level number direction keyword mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id number**

<b>Description</b>	A uniquely assigned MEP identifier with a given maintenance association
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table interface interface interface string level number direction keyword mep-id number</a>
<b>Tree</b>	<a href="#">mep-id</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface**

<b>Description</b>	Enter the subinterface context
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** [subinterface](#) *string* [primary-vlan](#) (*number* | *keyword*) [level](#) *number* [direction](#) *keyword*

<b>Description</b>	List of subinterfaces that have CFM configured and the association CFM operational state
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string</i> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">level</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *string*

<b>Description</b>	Subinterface name
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string</i> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">level</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**primary-vlan** (*number* | *keyword*)

<b>Description</b>	Primary VLAN or 'none'
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string</i> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">level</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
<b>Range</b>	1 to 4094
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**level number**

<b>Description</b>	The maintenance domain level
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string primary-vlan (number   keyword) level number direction keyword</i>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction keyword**

<b>Description</b>	The direction the MEP faces If 'down' the MEP sends CFM PDUs away from the MAC Relay Entity. If 'up' the MEP sends CFM PDUs towards the MAC Relay Entity.
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string primary-vlan (number   keyword) level number direction keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• down</li> <li>• up</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id string**

<b>Description</b>	A uniquely assigned administrative name used to identify a maintenance association
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface</a> <i>string primary-vlan (number   keyword) level number direction keyword association-id string</i>
<b>Tree</b>	<a href="#">association-id</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### defects *keyword*

**Description** Current received defects for the local MEP

**Context** [oam ethcfm cfm-stack-table subinterface subinterface subinterface](#) *string primary-vlan (number | keyword) level number direction keyword defects keyword*

**Tree** [defects](#)

**Options**

- none
- rdi-ccm
- mac-status
- remote-ccm
- error-ccm
- xcon-ccm
- ais
- csf-ais
- csf-rdi
- csf-los
- eth-ed

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### domain-id *string*

**Description** A uniquely assigned administrative name used to identify a maintenance domain

**Context** [oam ethcfm cfm-stack-table subinterface subinterface subinterface](#) *string primary-vlan (number | keyword) level number direction keyword domain-id string*

**Tree** [domain-id](#)

**String Length** 1 to 64

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	MAC address of the Management Point
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface string primary-vlan (number   keyword) level number direction keyword mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id number**

<b>Description</b>	A uniquely assigned MEP identifier with a given maintenance association
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface string primary-vlan (number   keyword) level number direction keyword mep-id number</a>
<b>Tree</b>	<a href="#">mep-id</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface-type string**

<b>Description</b>	The type of subinterface bridged or routed This is the value of srl_nokia-interfaces interface/subinterface/type
<b>Context</b>	<a href="#">oam ethcfm cfm-stack-table subinterface subinterface subinterface string primary-vlan (number   keyword) level number direction keyword subinterface-type string</a>
<b>Tree</b>	<a href="#">subinterface-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**domain domain-id string**

<b>Description</b>	Maintenance Domain list
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The Maintenance Domain includes all the configuration elements to define the individual domain behavior and scope of the CFM boundary. These are common elements that will be part of the related Maintenance Associations configured within the domain.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>Tree</b>	<a href="#">domain</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	4000

### **domain-id string**

<b>Description</b>	Unique Maintenance Domain identifier
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **association association-id string**

<b>Description</b>	Maintenance Association list
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>Tree</b>	<a href="#">association</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	4000

### **association-id string**

<b>Description</b>	Unique Maintenance Association identifier
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-auto-discovered-meps** *mep-id number*

<b>Description</b>	Add a list entry for association-auto-discovered-meps
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-auto-discovered-meps mep-id number</a>
<b>Tree</b>	<a href="#">association-auto-discovered-meps</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id** *number*

<b>Description</b>	A list of the MEP IDs added to the MA by auto discovery An auto-discovered remote MEP ID can be added to the association-mep list though configuration. Once added to the association-mep list it is removed from the auto-discovered MEP list.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-auto-discovered-meps mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-format** *keyword*

<b>Description</b>	Format of the ma-name
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-format keyword</a>
<b>Tree</b>	<a href="#">association-format</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>vlan-id</b> Primary VLAN ID</li> <li>• <b>string</b> Character string</li> <li>• <b>integer</b> 2 octet number</li> <li>• <b>vpn-id</b> IETF RFC 2685 VPN ID</li> <li>• <b>icc-based</b></li> </ul>

13 character string

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### association-meps *mep-id number*

<b>Description</b>	Add a list entry for association-meps
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-meps mep-id number</a>
<b>Tree</b>	<a href="#">association-meps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mep-id *number*

<b>Description</b>	A list of the MEP IDs expected for the MA This is a configured list of MEPs added to the MA.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-meps mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ccm-hold-time

<b>Description</b>	Enter the ccm-hold-time context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ccm-hold-time</a>
<b>Tree</b>	<a href="#">ccm-hold-time</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**delay-timeout** *number*

<b>Description</b>	Additional time before a MEP declares a fault for peer CCM timeout conditions  Each unit (centisecond) is the equivalent to 10ms, or one hundredth of a second in additional time added before the recognition of a peer time-out. This is applicable to MEPs with a CCM-interval 100ms and below. A value 0 means there is no additive delay
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ccm-hold-time delay-timeout number</a>
<b>Tree</b>	<a href="#">delay-timeout</a>
<b>Range</b>	0 to 1000
<b>Default</b>	0
<b>Units</b>	centiseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ccm-interval** *keyword*

<b>Description</b>	The interval between CCM transmissions to be used by all MEPs in Maintenance Association
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ccm-interval keyword</a>
<b>Tree</b>	<a href="#">ccm-interval</a>
<b>Default</b>	1s
<b>Options</b>	<ul style="list-style-type: none"> <li>• 10ms</li> <li>• 100ms</li> <li>• 1s</li> <li>• 10s</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ma-name**

<b>Description</b>	Context for association name
--------------------	------------------------------

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name</a>
<b>Tree</b>	<a href="#">ma-name</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**icc-value string**

<b>Description</b>	ITU Carrier Code (ICC) string required when using association-format icc-based
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name icc-value string</a>
<b>Tree</b>	<a href="#">icc-value</a>
<b>String Length</b>	8 to 13
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id string**

<b>Description</b>	VPN ID required when using association-format vpn-id  When the VPN OUI is less than 6 hex characters the configured value will be prepended with the appropriate number of zeros. When the VPN INDEX is less than 8 hex characters the configured value will be prepended with the appropriate number of zeros.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name id string</a>
<b>Tree</b>	<a href="#">id</a>
<b>String Length</b>	3 to 15
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name string**

<b>Description</b>	Name string required when using association-format string
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name name string</a>

<b>Tree</b>	<a href="#">name</a>
<b>String Length</b>	1 to 45
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**number** *number*

<b>Description</b>	Integer value required when using association-format integer
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name number number</a>
<b>Tree</b>	<a href="#">number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**vid** *number*

<b>Description</b>	VLAN ID number required when using association-format vlan-id
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string ma-name vid number</a>
<b>Tree</b>	<a href="#">vid</a>
<b>Range</b>	0 to 4094
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep** [mep-id](#) *reference*

<b>Description</b>	The list of Maintenance association End Points in a specific Maintenance Association
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference</a>
<b>Tree</b>	<a href="#">mep</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id** *reference*

<b>Description</b>	The integer that uniquely identified the MEP in the Maintenance Association
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string association association-id string association-meps mep-id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	The administrative state of the MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ccm-ltm-priority** *number*

<b>Description</b>	The dot1p priority for CCMs and LTMs transmitted by the MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference ccm-ltm-priority number</a>
<b>Tree</b>	<a href="#">ccm-ltm-priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## continuity-check

<b>Description</b>	This set of data definitions describes the handling of Ethernet Continuity Check (ETH-CCM)
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check</a>
<b>Tree</b>	<a href="#">continuity-check</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## active-defects *keyword*

<b>Description</b>	A list of all active CCM defect conditions in priority order from lowest to highest
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check active-defects keyword</a>
<b>Tree</b>	<a href="#">active-defects</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• rdi-ccm</li> <li>• mac-status</li> <li>• remote-ccm</li> <li>• error-ccm</li> <li>• xcon-ccm</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ccm-local-fault

<b>Description</b>	Enter the ccm local fault action context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check ccm-local-fault</a>
<b>Tree</b>	<a href="#">ccm-local-fault</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**action** *keyword*

<b>Description</b>	Provides the ability to operationally affect the attachment where the down MEP is configured  A down MEP that experiences a defect condition matching the lowest-fault-priority defect can affect the operational state of the interface/subinterface the down MEP is configured on when the ccm-local-fault value is 'permit'. When the ccm-local-fault value is 'deny' there is no operational impact on the interface/subinterface. This leaf is only supported on down MEPs.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check ccm-local-fault action keyword</a>
<b>Tree</b>	<a href="#">action</a>
<b>Default</b>	deny
<b>Options</b>	<ul style="list-style-type: none"> <li>• permit Action taken</li> <li>• deny No action taken</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ccm-sequence-error-count** *number*

<b>Description</b>	The total number of out-of-sequence CCMs received from all remote MEPs
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check ccm-sequence-error-count number</a>
<b>Tree</b>	<a href="#">ccm-sequence-error-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ccm-transmit** *keyword*

<b>Description</b>	An indicator of whether the MEP is configured to transmit CCM packets  This only controls the MEPs ability to transmit CCM packets. A MEP has no administrative configuration to stop the processing of received CCM packets. The receive state machine for CCM will execute and packet processing will occur regardless of the ccm-transmit admin-state.
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check ccm-transmit keyword</a>
<b>Tree</b>	<a href="#">ccm-transmit</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### highest-priority-defect-found *keyword*

<b>Description</b>	<p>Value indicating the highest-priority defect present since the MEP FNG state machine was in RESET</p> <p>Multiple defect conditions may be present on a local MEP at any given time. This leaf records the highest priority defect since the MEP Fault Notification Generator (FNG) State Machine was last in the FNG_RESET state. This will be cleared when the when no defect flags are present.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check highest-priority-defect-found keyword</a>
<b>Tree</b>	<a href="#">highest-priority-defect-found</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• rdi-ccm</li> <li>• mac-status</li> <li>• remote-ccm</li> <li>• error-ccm</li> <li>• xcon-ccm</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-cross-connect-ccm *binary*

<b>Description</b>	<p>Up to 1024 bytes of last-received CCM that triggered a cross-connect-ccm fault</p> <p>The last-cross-connect-ccm will be cleared when the condition is no longer present.</p>
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check last-cross-connect-ccm binary</a>
<b>Tree</b>	<a href="#">last-cross-connect-ccm</a>
<b>String Length</b>	1 to 1024
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-error-ccm** *binary*

<b>Description</b>	Up to 1024 bytes printed from of last-received CCM that triggered an invalid-ccm fault  The last-error-ccm will be cleared when the condition is no longer present.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check last-error-ccm binary</a>
<b>Tree</b>	<a href="#">last-error-ccm</a>
<b>String Length</b>	1 to 1024
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lowest-fault-priority-defect** *keyword*

<b>Description</b>	The lowest priority defect that will generate a Fault Alarm  When the lowest fault priority defect is reached or exceeded, a fault alarm will be generated. This also drives the ../ccm-local-fault-action for down MEPs. When the lowest priority fault priority defect is reached the ../ccm-local-fault with a value 'permit' will operationally affect the interface or subinterface on which it is attached.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check lowest-fault-priority-defect keyword</a>
<b>Tree</b>	<a href="#">lowest-fault-priority-defect</a>
<b>Default</b>	mac-remote-error-xcon
<b>Options</b>	<ul style="list-style-type: none"> <li>• all-def</li> <li>• mac-remote-error-xcon</li> <li>• remote-error-xcon</li> <li>• error-xcon</li> <li>• xcon</li> </ul>



	<ul style="list-style-type: none"> <li>no-xcon</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sent-interface-status *keyword*

<b>Description</b>	<p>Latest interface-status TLV value sent to the peer in the CCM packet</p> <p>Indicates the interface status TLV information included in the most recent Connectivity Check Message (CCM) transmission from the local MEP. If the local MEP CCM transmissions are not enabled, or if no interface status TLV was included in the most recent transmission, then ccm-tx-if-status will return a value of is-no-interface-status-tlv (0).</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check sent-interface-status keyword</a>
<b>Tree</b>	<a href="#">sent-interface-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-status-tlv           <p>Indicates either that no CCM has been received or that no interface status TLV was present in the last CCM received</p> </li> <li>up           <p>The interface is ready to pass packets</p> </li> <li>down           <p>The interface cannot pass packets</p> </li> <li>testing           <p>The interface is in some test mode</p> </li> <li>unknown           <p>The interface status cannot be determined for some reason</p> </li> <li>dormant           <p>The interface is not in a state to pass packets but is in a pending state, waiting for some external event</p> </li> <li>not-present           <p>Some component of the interface is missing</p> </li> <li>lower-layer-down           <p>The interface is down due to state of the lower layer interface condition</p> </li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sent-port-status** *keyword*

<b>Description</b>	<p>Latest port-status TLV value sent to the peer in the CCM packet</p> <p>Indicates the port status TLV information included in the most recent Connectivity Check Message (CCM) transmission from the local MEP. If the local MEP CCM transmissions are not enabled, or if no port status TLV was included in the most recent transmission, then <code>ccm-tx-port-status</code> will return a value of <code>ps-no-port-state-tlv (0)</code>.</p>
<b>Context</b>	<p><a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check sent-port-status keyword</a></p>
<b>Tree</b>	<p><a href="#">sent-port-status</a></p>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>no-status-tlv</code> <p>Indicates either that no CCM has been received or that no port status TLV was present in the last CCM received</p> </li> <li>• <code>blocked</code> <p>Ordinary data cannot pass freely through the port on which the remote MEP resides</p> </li> <li>• <code>up</code> <p>Ordinary data can pass freely through the port on which the remote MEP resides</p> </li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sent-remote-defect-indicator** *boolean*

<b>Description</b>	<p>Latest remote defect indicator (rdi) value sent to the peer in the CCM packet</p> <p>Indicates if the Remote Defect Indication (RDI) bit was set to on in the most recent Connectivity Check Message (CCM) transmission from the local MEP. If the local MEP CCM transmissions are not enabled, or if the RDI bit was not set in the most recent transmission, then <code>ccm-tx-rdi</code> will return a value of <code>'false (2)'</code>.</p>
<b>Context</b>	<p><a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference continuity-check sent-remote-defect-indicator boolean</a></p>
<b>Tree</b>	<p><a href="#">sent-remote-defect-indicator</a></p>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	A value indicating the direction which the MEP faces on the interface/subinterface  For all but MAC-VRF subinterfaces, the direction of the MEP must be 'down'. The MAC-VRF is a bridging entity and therefore supports the direction 'up'. The other entities are not bridging and therefore cannot support the direction 'up'.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference direction keyword</a>
<b>Tree</b>	<a href="#">direction</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• down</li> <li>• up</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-ref**

<b>Description</b>	Enter the interface-ref context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference interface-ref</a>
<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *reference*

<b>Description</b>	Reference to a base interface, for example a port
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference interface-ref interface reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *reference*

<b>Description</b>	Reference to a subinterface This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference interface-ref subinterface reference</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name string subinterface index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**linktrace**

<b>Description</b>	Data definitions related to a linktrace test result
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace</a>
<b>Tree</b>	<a href="#">linktrace</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**latest-run**

<b>Description</b>	Enter the latest-run context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run</a>
<b>Tree</b>	<a href="#">latest-run</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-mac-address** *string*

<b>Description</b>	Indicates the destination MAC address used for the last test When the destination is a remote-mepid the MAC address will be the resolved MAC address for the remote mepid
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run destination-mac-address string</a>
<b>Tree</b>	<a href="#">destination-mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-time string**

<b>Description</b>	UTC date and time when a test ended
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run end-time string</a>
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority number**

<b>Description</b>	The dot1p priority to be used in the transmitted test packet
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run priority number</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mep-id number**

<b>Description</b>	Indicates the remote mepid when remote-mep-id was the target and not a MAC address
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run remote-mep-id number</a>
<b>Tree</b>	<a href="#">remote-mep-id</a>
<b>Range</b>	1 to 8191

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reply *reply-order number*

<b>Description</b>	The list of LTRs associated with a specific Linktrace transaction
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number</a>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	32

### reply-order *number*

<b>Description</b>	An index to distinguish among multiple LTRs with the same LTR transaction-id field value  The reply-order are assigned sequentially from 1, in the order that the Linktrace Initiator received the LTR
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### chassis-id (*mac-address | string | binary*)

<b>Description</b>	The value relating to the chassis-id-subtype
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number chassis-id (mac-address   string   binary)</a>
<b>Tree</b>	<a href="#">chassis-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**chassis-id-subtype** (*number* | *keyword*)

<b>Description</b>	Data definitions associated with the Sender ID TLV
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number chassis-id-subtype (number   keyword)</a>
<b>Tree</b>	<a href="#">chassis-id-subtype</a>
<b>Range</b>	8 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• CHASSIS_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737</li> <li>• INTERFACE_ALIAS Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• PORT_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port or backplane component</li> <li>• MAC_ADDRESS Chassis identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order), of a port on the containing chassis as defined in IEEE Std 802-2001</li> <li>• NETWORK_ADDRESS Chassis identifier based on a network address, associated with a particular chassis. The encoded address is composed of two fields. The first field is a single octet, representing the IANA AddressFamilyNumbers value for the specific address type, and the second field is the network address value</li> <li>• INTERFACE_NAME Chassis identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• LOCAL Chassis identifier based on a locally defined value</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**egress-action** *keyword*

<b>Description</b>	An enumerated value indicating the value returned in the Egress Action field
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This leaf is not present if no value is returned in the LTR.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number egress-action keyword</a>
<b>Tree</b>	<a href="#">egress-action</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ok Indicates the target data frame would be passed through to the MAC Relay Entity</li> <li>down Indicates the Bridge Ports MAC Operational parameter is false</li> <li>blocked Indicates the target data frame would not be forwarded if received on this Port due to active topology enforcement</li> <li>vid Indicates the ingress port is not in the member set of the LTMs VID, and ingress filtering is enabled This means the target data frame would be filtered by ingress filtering.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **egress-mac** *string*

<b>Description</b>	The MAC address returned in the Egress MAC Address field This leaf is not present if no value is returned in the LTR.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number egress-mac string</a>
<b>Tree</b>	<a href="#">egress-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **egress-port-id**

<b>Description</b>	Enter the egress-port-id context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number egress-port-id</a>



<b>Tree</b>	<a href="#">egress-port-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-id-subtype** *keyword*

<b>Description</b>	The Egress Port ID field and the corresponding port ID value This leaf is not present if no value is returned in the LTR.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number egress-port-id port-id-subtype keyword</a>
<b>Tree</b>	<a href="#">port-id-subtype</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>INTERFACE_ALIAS</b> Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• <b>PORT_COMPONENT</b> Port identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port component</li> <li>• <b>MAC_ADDRESS</b> Port identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order) associated with a port</li> <li>• <b>NETWORK_ADDRESS</b> Port identifier based on a network address, associated with a particular port</li> <li>• <b>INTERFACE_NAME</b> Port identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• <b>AGENT_CIRCUIT_ID</b> Port identifier based on the circuit id in the DHCP relay agent information option as defined in IETF RFC 3046</li> <li>• <b>LOCAL</b> Port identifier based on a locally defined alphanumeric string</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** (*mac-address* | *string* | *binary*)

<b>Description</b>	The value of the port id subtype
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number egress-port-id value (mac-address   string   binary)</a>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarded** *boolean*

<b>Description</b>	A Boolean value stating whether an LTM was forwarded by the responding MP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number forwarded boolean</a>
<b>Tree</b>	<a href="#">forwarded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ingress-action** *keyword*

<b>Description</b>	An enumerated value indicating the value returned in the Ingress Action field This leaf is not present if no value is returned in the LTR.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ingress-action keyword</a>
<b>Tree</b>	<a href="#">ingress-action</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ok Indicates the target data frame would be passed through to the MAC Relay Entity</li> <li>• down Indicates the Bridge Ports MAC Operational parameter is false</li> <li>• blocked Indicates the target data frame would not be forwarded if received on this Port due to active topology enforcement</li> </ul>

- vid  
Indicates the ingress port is not in the member set of the LTMs VID, and ingress filtering is enabled  
This means the target data frame would be filtered by ingress filtering.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ingress-mac *string*

<b>Description</b>	The MAC address returned in the Ingress MAC Address field This leaf is not present if no value is returned in the LTR.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ingress-mac string</a>
<b>Tree</b>	<a href="#">ingress-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ingress-port-id

<b>Description</b>	Enter the ingress-port-id context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ingress-port-id</a>
<b>Tree</b>	<a href="#">ingress-port-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-id-subtype *keyword*

<b>Description</b>	The Ingress Port ID field and the corresponding port ID value This leaf is not present if no value is returned in the LTR.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ingress-port-id port-id-subtype keyword</a>
<b>Tree</b>	<a href="#">port-id-subtype</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>INTERFACE_ALIAS</b> Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• <b>PORT_COMPONENT</b> Port identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port component</li> <li>• <b>MAC_ADDRESS</b> Port identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order) associated with a port</li> <li>• <b>NETWORK_ADDRESS</b> Port identifier based on a network address, associated with a particular port</li> <li>• <b>INTERFACE_NAME</b> Port identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• <b>AGENT_CIRCUIT_ID</b> Port identifier based on the circuit id in the DHCP relay agent information option as defined in IETF RFC 3046</li> <li>• <b>LOCAL</b> Port identifier based on a locally defined alphanumeric string</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** (*mac-address* | *string* | *binary*)

<b>Description</b>	The value of the port id subtype
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ingress-port-id value (mac-address   string   binary)</a>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-egress-identifier**

<b>Description</b>	TLV included with in the LTM used to identify the instantiating or relaying management point
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number last-egress-identifier</a>
<b>Tree</b>	<a href="#">last-egress-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**integer number**

<b>Description</b>	An octet string the first two bytes of the egress-identifier
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number last-egress-identifier integer number</a>
<b>Tree</b>	<a href="#">integer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	The last six bytes of the egress identifier, the MAC address
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number last-egress-identifier mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ltr-relay keyword**

<b>Description</b>	An enumerated value indicating the value returned in the Relay Action field
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number ltr-relay keyword</a>
<b>Tree</b>	<a href="#">ltr-relay</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>hit Indicates the LTM reached an MP whose MAC address matches the target MAC address</li> <li>filtering-database Indicates the Egress Port was determined by consulting the Filtering Database</li> <li>mip-ccm-database Indicates the Egress Port was determined by consulting the MIP CCM Database</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### management-address *string*

<b>Description</b>	The address that can be used to access and manage the remote system
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number management-address string</a>
<b>Tree</b>	<a href="#">management-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### management-address-domain *string*

<b>Description</b>	Identifies the type and format of the related management-address leaf
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number management-address-domain string</a>
<b>Tree</b>	<a href="#">management-address-domain</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-egress-identifier**

<b>Description</b>	TLV included with in the LTM used to identify the instantiating or relaying management point
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number next-egress-identifier</a>
<b>Tree</b>	<a href="#">next-egress-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**integer number**

<b>Description</b>	An octet string the first two bytes of the egress-identifier
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number next-egress-identifier integer number</a>
<b>Tree</b>	<a href="#">integer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	The last six bytes of the egress identifier, the MAC address
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number next-egress-identifier mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-ttl number**

<b>Description</b>	The integer Reply TTL field value returned in the LTR
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number reply-ttl number</a>
<b>Tree</b>	<a href="#">reply-ttl</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**terminal-mep** *boolean*

<b>Description</b>	The terminal MEP flag field was set in the LTR indicating the LTM reached a MEP boundary for the MA
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run reply reply-order number terminal-mep boolean</a>
<b>Tree</b>	<a href="#">terminal-mep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	UTC date and time when the test started
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run start-time string</a>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-status** *keyword*

<b>Description</b>	The status of the last test that was executed  A value of 'completed' means the test has run and ended without intervention, to completion. A value of 'terminated-incomplete' indicates the test started but conditions existed that caused it to terminate before the natural completion. A value 'in-progress' means the test is currently executing. A value of 'failed-to-start' meant a requirement to start the test
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was not met and the test had failed to start. When this value is set the statistics from a prior latest-run are deleted.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run test-status keyword</a>
<b>Tree</b>	<a href="#">test-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• completed</li> <li>• terminated-incomplete</li> <li>• in-progress</li> <li>• failed-to-start</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transaction-id *number*

<b>Description</b>	The sequence number included in the LTM packet
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run transaction-id number</a>
<b>Tree</b>	<a href="#">transaction-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmit-ltm-flags *bits*

<b>Description</b>	<p>The Flags field for LTMs transmitted by the MEP</p> <p>'use-fdb-only' indicates only the network instance mac-table (or forwarding database) is to be used to forward the LTM to the next hop.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run transmit-ltm-flags bits</a>
<b>Tree</b>	<a href="#">transmit-ltm-flags</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tll *number*

<b>Description</b>	An initial value for the LTM time to live field
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace latest-run ttl number</a>
<b>Tree</b>	<a href="#">ttl</a>
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-transaction-number** *number*

<b>Description</b>	Next sequence number to be sent in a linktrace message
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace next-transaction-number number</a>
<b>Tree</b>	<a href="#">next-transaction-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **status** *keyword*

<b>Description</b>	<p>If an active linktrace test is executing from this MEP</p> <p>Only a single Linktrace test can be active on a MEP at one time. When the status is 'active' the MEP has a linktrace session open. Another linktrace test from this MEP is not allowed. When the status is 'inactive' the MEP does not currently have a linktrace session open.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unexpected-ltr-received** *number*

<b>Description</b>	The total number of LTR messages received no corresponding outstanding LTM request
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference linktrace unexpected-ltr-received number</a>
<b>Tree</b>	<a href="#">unexpected-ltr-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## loopback

<b>Description</b>	Enter the loopback context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback</a>
<b>Tree</b>	<a href="#">loopback</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multicast-latest-run

<b>Description</b>	Enter the multicast-latest-run context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run</a>
<b>Tree</b>	<a href="#">multicast-latest-run</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## data-length *number*

<b>Description</b>	An arbitrary amount of data included in the data tlv, if the data tlv is selected to be sent
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run data-length number</a>
<b>Tree</b>	<a href="#">data-length</a>
<b>Range</b>	64 to 9612
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-time string**

**Description** UTC date and time when a test ended

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run end-time string](#)

**Tree** [end-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval keyword**

**Description** The frequency of the LBM packets

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run interval keyword](#)

**Tree** [interval](#)

**Default** 1s

**Options**

- 0s
- 10ms
- 20ms
- 50ms
- 100ms
- 200ms
- 300ms
- 400ms
- 500ms
- 600ms
- 700ms
- 800ms
- 900ms
- 1s
- 10s

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority number

**Description** The priority parameter to be used in the transmitted LBMs

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run priority number](#)

**Tree** [priority](#)

**Range** 0 to 7

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mep-mac remote-mac-address string

**Description** Enter the remote-mep-mac list instance

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run remote-mep-mac remote-mac-address string](#)

**Tree** [remote-mep-mac](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mac-address string

**Description** Specifies the MAC address of the remote MEP responding to the multicast loopback message

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run remote-mep-mac remote-mac-address string](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sequence-number sequence-number number received-index number

**Description** Enter the sequence-number list instance

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run remote-mep-mac remote-mac-address string sequence-number sequence-number number received-index number</a>
<b>Tree</b>	<a href="#">sequence-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-number** *number*

<b>Description</b>	Specifies the sequence number contained within the reply message
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run remote-mep-mac remote-mac-address string sequence-number sequence-number number received-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-index** *number*

<b>Description</b>	Indicates the order in which the reply was received for the corresponding remote MAC address  This is a locally assigned index that can be used to detect out of order responses.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run remote-mep-mac remote-mac-address string sequence-number sequence-number number received-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **start-time** *string*

<b>Description</b>	UTC date and time when the test started
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run start-time string</a>
<b>Tree</b>	<a href="#">start-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received-packets *number*

<b>Description</b>	Total number of valid multicast Loopback Replies received
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run statistics received-packets number</a>
<b>Tree</b>	<a href="#">received-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received-unexpected-sequence-number *number*

<b>Description</b>	The total number of Loopback Replies received and discarded due to unexpected sequence number
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run statistics received-unexpected-sequence-number number</a>
<b>Tree</b>	<a href="#">received-unexpected-sequence-number</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted-packets** *number*

<b>Description</b>	Indicates the number of packets sent during the last multicast loopback test
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run statistics transmitted-packets number</a>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-status** *keyword*

<b>Description</b>	<p>The status of the last test that was executed</p> <p>A value of 'completed' means the test has run and ended without intervention, to completion. A value of 'terminated-incomplete' indicates the test started but conditions existed that caused it to terminate before the natural completion. A value 'in-progress' means the test is currently executing. A value of 'failed-to-start' meant a requirement to start the test was not met and the test had failed to start. When this value is set the statistics from a prior latest-run are deleted.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback multicast-latest-run test-status keyword</a>
<b>Tree</b>	<a href="#">test-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• completed</li> <li>• terminated-incomplete</li> <li>• in-progress</li> <li>• failed-to-start</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-sequence-number** *number*

<b>Description</b>	Next sequence number to be sent in a linktrace message
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback next-sequence-number number</a>
<b>Tree</b>	<a href="#">next-sequence-number</a>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**status** *keyword*

<b>Description</b>	If an active loopback test is executing from this MEP  Only a single loopback test can be active on a MEP at one time. When the status is 'active' the MEP has a loopback session open. Another loopback test from this MEP is not allowed. When the status is 'inactive' the MEP does not currently have a loopback session open.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unicast-latest-run**

<b>Description</b>	Enter the unicast-latest-run context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run</a>
<b>Tree</b>	<a href="#">unicast-latest-run</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**data-length** *number*

<b>Description</b>	An arbitrary amount of data included in the data tlv, if the data tlv is selected to be sent
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run data-length number</a>
<b>Tree</b>	<a href="#">data-length</a>
<b>Range</b>	64 to 9612

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-mac-address** *string*

<b>Description</b>	Indicates the destination MAC address used for the last test When the destination is a remote-mepid the MAC address will be the resolved MAC address for the remote mepid
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run destination-mac-address string</a>
<b>Tree</b>	<a href="#">destination-mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-time** *string*

<b>Description</b>	UTC date and time when a test ended
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run end-time string</a>
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval** *keyword*

<b>Description</b>	The frequency of the LBM packets
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run interval keyword</a>
<b>Tree</b>	<a href="#">interval</a>
<b>Default</b>	1s
<b>Options</b>	<ul style="list-style-type: none"> <li>• 0s</li> <li>• 10ms</li> <li>• 20ms</li> <li>• 50ms</li> </ul>

- 100ms
- 200ms
- 300ms
- 400ms
- 500ms
- 600ms
- 700ms
- 800ms
- 900ms
- 1s
- 10s

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority number****Description**

The dot1p priority to be used in the transmitted test packet

**Context**[oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run priority number](#)**Tree**[priority](#)**Range**

0 to 7

**Default**

7

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mep-id number****Description**

Indicates the remote mepid when remote-mep-id was the target and not a MAC address

**Context**[oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run remote-mep-id number](#)**Tree**[remote-mep-id](#)**Range**

1 to 8191

**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-number** *number*

**Description** The initial LBM sequence number used in the first LBM packet

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run sequence-number number](#)

**Tree** [sequence-number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **start-time** *string*

**Description** UTC date and time when the test started

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run start-time string](#)

**Tree** [start-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

**Description** Enter the statistics context

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **packet-loss** *decimal-number*

**Description** Percentage of packet loss during testing

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics packet-loss decimal-number</a>
<b>Tree</b>	<a href="#">packet-loss</a>
<b>Range</b>	0.00 to 100.00
<b>Units</b>	percent
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-bad-msdu *number*

<b>Description</b>	The total number of LBRs received whose mac_service_data_unit did not match that of the corresponding LBM, excluding OpCode
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics received-bad-msdu number</a>
<b>Tree</b>	<a href="#">received-bad-msdu</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-in-order *number*

<b>Description</b>	Total number of valid, in-order Loopback Replies received
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics received-in-order number</a>
<b>Tree</b>	<a href="#">received-in-order</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### received-out-of-order *number*

<b>Description</b>	The total number of valid, out-of-order Loopback Replies received
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics received-out-of-order number</a>
<b>Tree</b>	<a href="#">received-out-of-order</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received-unexpected-sequence-number** *number*

<b>Description</b>	The total number of Loopback Replies received and discarded due to unexpected sequence number
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics received-unexpected-sequence-number number</a>
<b>Tree</b>	<a href="#">received-unexpected-sequence-number</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sent-packets** *number*

<b>Description</b>	Indicates the number of packets sent during the last test
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run statistics sent-packets number</a>
<b>Tree</b>	<a href="#">sent-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-status** *keyword*

<b>Description</b>	The status of the last test that was executed A value of 'completed' means the test has run and ended without intervention, to completion. A value of 'terminated-incomplete' indicates the test started but conditions existed that caused it to terminate before
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the natural completion. A value 'in-progress' means the test is currently executing. A value of 'failed-to-start' meant a requirement to start the test was not met and the test had failed to start. When this value is set the statistics from a prior latest-run are deleted.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference loopback unicast-latest-run test-status keyword</a>
<b>Tree</b>	<a href="#">test-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• completed</li> <li>• terminated-incomplete</li> <li>• in-progress</li> <li>• failed-to-start</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-address

<b>Description</b>	Context allows for the MEP MAC configuration Leaf /ethcfm/mac-allocation/mode determines which of the MAC configurations are applied.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## custom-address *string*

<b>Description</b>	Custom configured MAC address for the MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address custom-address string</a>
<b>Tree</b>	<a href="#">custom-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**custom-mac-pool**

<b>Description</b>	Enter the custom-mac-pool context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address custom-mac-pool</a>
<b>Tree</b>	<a href="#">custom-mac-pool</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Value used to select a MAC address from the custom-mac-pool Index reference to the ordered list of MAC addresses in the pool. the same value should not be reused in the same network-instance on different subinterfaces.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address custom-mac-pool index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Range</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name reference**

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address custom-mac-pool name reference</a>
<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-mac-pool-index number**

<b>Description</b>	Value used to select a MAC address from the system-mac-pool
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Index reference to the ordered list of MAC addresses in the pool. the same value should not be reused in the same network-instance on different subinterfaces.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference mac-address system-mac-pool-index number</a>
<b>Tree</b>	<a href="#">system-mac-pool-index</a>
<b>Range</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **opcode** [opcode-name keyword](#)

<b>Description</b>	Enter the CFM OpCode list instance
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference opcode opcode-name keyword</a>
<b>Tree</b>	<a href="#">opcode</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **opcode-name** [keyword](#)

<b>Description</b>	The name that defines which CFM OpCode for the statistics
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference opcode opcode-name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• total</li> <li>• other</li> <li>• ccm</li> <li>• lbr</li> <li>• lbm</li> <li>• ltr</li> <li>• ltm</li> <li>• ais</li> <li>• lck</li> <li>• tst</li> <li>• laps</li> <li>• raps</li> <li>• mcc</li> </ul>

- lmr
- lmm
- 1dm
- dmr
- dmm
- exr
- exm
- csf
- vsr
- vsm
- 1sl
- slr
- slm
- gnm

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

**received number****Description**

The total number of PDUs received with the specified OpCode

**Context**[oam ethcfm domain domain-id string association association-id string mep mep-id reference opcode opcode-name keyword received number](#)**Tree**[received](#)**Default**

0

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted number****Description**

The total number of PDUs transmitted with the specified OpCode

**Context**[oam ethcfm domain domain-id string association association-id string mep mep-id reference opcode opcode-name keyword transmitted number](#)**Tree**[transmitted](#)**Default**

0

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mep** *remote-mep-id number*

<b>Description</b>	The list of remote MEPs in the MEP CCM database
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number</a>
<b>Tree</b>	<a href="#">remote-mep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mep-id** *number*

<b>Description</b>	The MEP ID of a remote MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**auto-discovered** *boolean*

<b>Description</b>	Indicates if the remote MEP has be auto-discovered 'true' indicates the remote MEP has been auto-discovered  Display the method by which the remote MEP has been added to the remote-mep database. When 'false' the remote MEP has been added by manual configuration. When 'true' the remote-mep has been added using the auto discovery method.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number auto-discovered boolean</a>
<b>Tree</b>	<a href="#">auto-discovered</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**chassis-id** (*mac-address | string | binary*)

<b>Description</b>	The value relating to the chassis-id-subtype
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number chassis-id (mac-address   string   binary)</a>
<b>Tree</b>	<a href="#">chassis-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### chassis-id-subtype (*number | keyword*)

<b>Description</b>	Data definitions associated with the Sender ID TLV
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number chassis-id-subtype (number   keyword)</a>
<b>Tree</b>	<a href="#">chassis-id-subtype</a>
<b>Range</b>	8 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• CHASSIS_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737</li> <li>• INTERFACE_ALIAS Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• PORT_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port or backplane component</li> <li>• MAC_ADDRESS Chassis identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order), of a port on the containing chassis as defined in IEEE Std 802-2001</li> <li>• NETWORK_ADDRESS Chassis identifier based on a network address, associated with a particular chassis. The encoded address is composed of two fields. The first field is a single octet, representing the IANA AddressFamilyNumbers value for the specific address type, and the second field is the network address value</li> <li>• INTERFACE_NAME Chassis identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• LOCAL Chassis identifier based on a locally defined value</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface-status-tlv** *keyword*

<b>Description</b>	The enumerated value from the Interface Status TLV from the last CCM received from the remote MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number interface-status-tlv keyword</a>
<b>Tree</b>	<a href="#">interface-status-tlv</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-status-tlv Indicates either that no CCM has been received or that no interface status TLV was present in the last CCM received</li> <li>• up The interface is ready to pass packets</li> <li>• down The interface cannot pass packets</li> <li>• testing The interface is in some test mode</li> <li>• unknown The interface status cannot be determined for some reason</li> <li>• dormant The interface is not in a state to pass packets but is in a pending state, waiting for some external event</li> <li>• not-present Some component of the interface is missing</li> <li>• lower-layer-down The interface is down due to state of the lower layer interface condition</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac-address** *string*

<b>Description</b>	The MAC address of the remote MEP.
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### management-address *string*

<b>Description</b>	The address that can be used to access and manage the remote system
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number management-address string</a>
<b>Tree</b>	<a href="#">management-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### management-address-domain *string*

<b>Description</b>	Identifies the type and format of the related management-address leaf
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number management-address-domain string</a>
<b>Tree</b>	<a href="#">management-address-domain</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-status-tlv *keyword*

<b>Description</b>	The enumerated value from the Port Status TLV from the last CCM received from the remote MEP
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number port-status-tlv keyword</a>
<b>Tree</b>	<a href="#">port-status-tlv</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-status-tlv</li> </ul> <p>Indicates either that no CCM has been received or that no port status TLV was present in the last CCM received</p>

- blocked  
Ordinary data cannot pass freely through the port on which the remote MEP resides
- up  
Ordinary data can pass freely through the port on which the remote MEP resides

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### receiving-ccm *boolean*

<b>Description</b>	Indicates whether CCM messages are being received
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number receiving-ccm boolean</a>
<b>Tree</b>	<a href="#">receiving-ccm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-defect-indicator *boolean*

<b>Description</b>	An indication of the state of the RDI bit in the last received CCM, 'true' for RDI set  The CCM message contains a flag to indicate if a MEP has detected a defect condition. When the RDI bit is set to 1 in the PDU that means the MEP is experiencing a defect condition and is including this in the transmitted CCM packets. When no defects are detected the RDI bit is set to 0 in the packet.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number remote-defect-indicator boolean</a>
<b>Tree</b>	<a href="#">remote-defect-indicator</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mep-failed-ok-time *number*

<b>Description</b>	The time at which the Remote MEP state machine last entered either the RMEP_FAILED or RMEP_OK state
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This type is based on the timeticks type defined in RFC 6991, but with 64-bit width. It represents the time, modulo  $2^{64}$ , in hundredths of a second between two epochs.

<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number remote-mep-failed-ok-time number</a>
<b>Tree</b>	<a href="#">remote-mep-failed-ok-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mep-state keyword

<b>Description</b>	An enumerated value indicating the operational state of the Remote MEP state machine
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference remote-mep remote-mep-id number remote-mep-state keyword</a>
<b>Tree</b>	<a href="#">remote-mep-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• idle Indicates momentary state during reset</li> <li>• start Indicates the timer has not expired since the state machine was reset, and no valid CCM has yet been received</li> <li>• failed Indicates the timer has expired, both since the state machine was reset and since a valid CCM was received.</li> <li>• ok Indicates the timer has not expired since a valid CCM was received.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance

<b>Description</b>	Enter the network-instance context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string network-instance</a>
<b>Tree</b>	<a href="#">network-instance</a>



<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *reference*

<b>Description</b>	The network instance to which the information in this maintenance-association applies
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string network-instance name reference</a>
<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **remote-mep-auto-discovery**

<b>Description</b>	This set of data definitions describes the auto discovery behavior for remote MEPs
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string remote-mep-auto-discovery</a>
<b>Tree</b>	<a href="#">remote-mep-auto-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	<p>Enable the ability to auto-discover remote MEPs within the Maintenance Association</p> <p>When the admin-state is 'enable' unknown remote MEP peers which have the same Maintenance Association information will be automatically added to the remote-mep database and these unknown peer MEPS will not raise the defect error-ccm. When the admin-state is 'disable' unknown remote MEP peers will not automatically be added to the remote-mep database. Unknown MEPs will cause the defect error-ccm to be raised.</p> <p>If the admin-state value is changed from 'enable' to 'disable' all previously learned MEPs for the Maintenance Association will be removed from the remote-mep database and auto-discovery will be disabled.</p>
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string remote-mep-auto-discovery admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### aging-timer (*number | keyword*)

<b>Description</b>	<p>Optional time in seconds the peer MEP remains in the remote-mep database after defect remote-ccm</p> <p>Peer MEPs added to the remote-mep database do not age out unless the optional aging-timer is configured. The aging-timer value is the additional time the remote peer MEP remains in the database since the recognition of the defect remote-ccm (peer timeout where no packets have arrived from the peer in 3.5 times the ccm-interval). A value of 'none' disables aging.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string remote-mep-auto-discovery aging-timer (number   keyword)</a>
<b>Tree</b>	<a href="#">aging-timer</a>
<b>Range</b>	1 to 86400
<b>Default</b>	none
<b>Units</b>	seconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sender-id-permission-type *keyword*

<b>Description</b>	<p>Whether to include the Sender ID TLV with configured type</p> <p>Sender ID TLV will be sent when the id-permission is set to a value other than 'none'. When transmitting the Sender ID TLV the information carried in the TLV will match the configured value. When id-permission is set to 'chassis' the chassis information (chassis-component or local) will be based on the /ethcfm/sender-id/chassis-type configuration.</p>
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string sender-id-permission-type keyword</a>
<b>Tree</b>	<a href="#">sender-id-permission-type</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• chassis</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **domain-format** *keyword*

<b>Description</b>	Format of the md-name
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string domain-format keyword</a>
<b>Tree</b>	<a href="#">domain-format</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none No Maintenance Domain Name</li> <li>• dns-like Domain Name based string</li> <li>• mac-address MAC address</li> <li>• string Character string</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **level** *number*

<b>Description</b>	<p>Integer identifying the Maintenance Domain Level</p> <p>Higher numbers correspond Maintenance Domains with the greatest physical reach. Lower numbers correspond to Maintenance Domains with more limited physical reach. CFM packets with higher levels will flow transparently across domains of lower level values.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string level number</a>
<b>Tree</b>	<a href="#">level</a>
<b>Range</b>	0 to 7

<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## md-name

<b>Description</b>	Context for domain name
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string md-name</a>
<b>Tree</b>	<a href="#">md-name</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dns string

<b>Description</b>	DNS format sting required when using domain-format 'dns-like'
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string md-name dns string</a>
<b>Tree</b>	<a href="#">dns</a>
<b>String Length</b>	1 to 43
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac string

<b>Description</b>	MAC address string required when using domain-format 'mac-address'
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string md-name mac string</a>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name string

<b>Description</b>	Name string required when using domain-format 'string'
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string md-name name string</a>

<b>Tree</b>	<a href="#">name</a>
<b>String Length</b>	1 to 43
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **two-octet-int** *number*

<b>Description</b>	Two bytes value required when using domain-format 'mac-address'
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string md-name two-octet-int number</a>
<b>Tree</b>	<a href="#">two-octet-int</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **learned-remote-mac** [domain-id string association-id string local-mep-id number remote-mep-id number](#)

<b>Description</b>	Enter the learned-remote-mac list instance
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number</a>
<b>Tree</b>	<a href="#">learned-remote-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **domain-id** *string*

<b>Description</b>	A unique administratively assigned name used to identify a domain
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id string**

<b>Description</b>	A unique administratively assigned name used to identify an association
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-mep-id number**

<b>Description</b>	Specifies a local MEP identifier unique over a given maintenance association
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mep-id number**

<b>Description</b>	Specifies a remote MEP identifier unique over a given maintenance association
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-mac-address string**

<b>Description</b>	The the source MAC address used by the remote MEP in the most recently received CCM PDU
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number remote-mac-address string</a>
<b>Tree</b>	<a href="#">remote-mac-address</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stale-flag *boolean*

<b>Description</b>	<p>Indicates if the learned MAC entry for this remote MEP matches the entry found in the list on the local MEP</p> <p>The value 'false' indicates that the MAC address matches the entry found in both the lists for the same local and remote MEP values and therefore is not considered stale.</p> <p>The value 'true' indicates either the entries do not match, or there is no equivalent entry for the remote MEP in the list on the local MEP, so the learned remote MAC address in this table is considered stale.</p>
<b>Context</b>	<a href="#">oam ethcfm learned-remote-mac domain-id string association-id string local-mep-id number remote-mep-id number stale-flag boolean</a>
<b>Tree</b>	<a href="#">stale-flag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-allocation

<b>Description</b>	Enter the mac-allocation context
<b>Context</b>	<a href="#">oam ethcfm mac-allocation</a>
<b>Tree</b>	<a href="#">mac-allocation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### custom-mac-pool *name string*

<b>Description</b>	Enter the custom-mac-pool list instance
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name string</a>
<b>Tree</b>	<a href="#">custom-mac-pool</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name** *string*

<b>Description</b>	Custom MAC pool list
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i>
<b>String Length</b>	1 to 247
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**count** *number*

<b>Description</b>	Number of contiguous MAC addresses in the custom-mac-pool Last byte of 'starting-mac' is incremented to create a list of unique MAC addresses for the pool.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">count</a> <i>number</i>
<b>Tree</b>	<a href="#">count</a>
<b>Range</b>	1 to 64
<b>Default</b>	64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**highest-index-in-use** *number*

<b>Description</b>	Highest index value configured against the pool Resizing the pool is allowed if ethcfm/mac-allocation/custom-mac-pool/count is greater than or equal to this value.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">highest-index-in-use</a> <i>number</i>
<b>Tree</b>	<a href="#">highest-index-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address** [index](#) *number* [mac-address](#) *string*

<b>Description</b>	Add a list entry for mac-address
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<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">mac-address index number mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Index associated with the unicast MAC address
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">mac-address index number mac-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	MAC address associated with the index
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">mac-address index number mac-address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**starting-mac string**

<b>Description</b>	First unicast MAC address of the pool Combination of the 'starting-mac' and the 'count' cannot cause a change to the first five bytes of the MAC address.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation custom-mac-pool name</a> <i>string</i> <a href="#">starting-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">starting-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *name string*

<b>Description</b>	Enter the interface list instance
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Interface list Allocated MAC addressing from interface perspective
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string</a>
<b>String Length</b>	3 to 20
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-complex** *number*

<b>Description</b>	Forwarding complex on the linecard hosting the interface
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string forwarding-complex number</a>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**linecard** *number*

<b>Description</b>	Linecard hosting the interface
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string linecard number</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep domain-id string association-id string mep-id number**

<b>Description</b>	MEP List
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number</a>
<b>Tree</b>	<a href="#">mep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**domain-id string**

<b>Description</b>	Unique administratively assigned name used to identify a domain
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id string**

<b>Description</b>	Unique administratively assigned name used to identify an association
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id number**

<b>Description</b>	MEP identifier unique over a given maintenance association
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### custom-mac-pool-name *string*

**Description** Name of the custom-mac-pool

**Context** [oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number custom-mac-pool-name string](#)

**Tree** [custom-mac-pool-name](#)

**String Length** 1 to 247

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### index *number*

**Description** Index associated with the MAC address  
Only displayed for mac-allocated-type of 'custom-mac-pool' or 'system-mac-pool'.

**Context** [oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number index number](#)

**Tree** [index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-address *string*

**Description** MAC address assigned to the MP

**Context** [oam ethcfm mac-allocation interface name string mep domain-id string association-id string mep-id number mac-address string](#)

**Tree** [mac-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-allocated-type** *keyword*

<b>Description</b>	Method by which the active MAC address was selected
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">mac-allocated-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mac-allocated-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>port Maintenance Point (MP) MAC allocated using hardware MAC address of the Ethernet port</li> <li>custom-mac-pool Maintenance Point (MP) MAC allocated using custom-mac-pool</li> <li>system-mac-pool Maintenance Point (MP) MAC allocated using system-mac-pool</li> <li>custom-address Maintenance Point (MP) allocated using custom MAC address</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *string*

<b>Description</b>	Subinterface name  MP created on subinterface will include the subinterface information. MP created on interface will not include this leaf.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation interface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">subinterface</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mode** *keyword*

<b>Description</b>	ETHCFM MP MAC address allocation method  Selection MAC address configuration under the MP is controlled by preference unique to each mode.
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<b>Context</b>	<a href="#">oam ethcfm mac-allocation mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>port Maintenance Point (MP) MAC allocation uses hardware MAC address of the Ethernet port Other MAC address configuration methods under the MP are ignored</li> <li>mac-pool Maintenance Point (MP) MAC allocation prefers the custom or system mac pools Preference order of configured options under the MP custom-mac-pool, system-mac-pool</li> <li>any Maintenance Point (MP) allocation may use any MAC allocation method Preference order of configured options under the MP custom-address, custom-mac-pool, system-mac-pool, port</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **network-instance** [name](#) *string*

<b>Description</b>	Enter the network-instance list instance
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	Network instance list Allocated MAC addressing from network instance perspective
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i>
<b>String Length</b>	1 to 247
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *name string*

<b>Description</b>	Enter the subinterface list instance
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Subinterface list
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep** *domain-id string association-id string mep-id number*

<b>Description</b>	MEP List
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i>
<b>Tree</b>	<a href="#">mep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**domain-id** *string*

<b>Description</b>	Unique administratively assigned name used to identify a domain
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### association-id *string*

**Description** Unique administratively assigned name used to identify an association

**Context** [oam ethcfm mac-allocation network-instance name](#) *string* [subinterface name](#) *string* [mep domain-id](#) *string* [association-id](#) *string* [mep-id](#) *number*

**String Length** 1 to 64

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mep-id *number*

**Description** MEP identifier unique over a given maintenance association

**Context** [oam ethcfm mac-allocation network-instance name](#) *string* [subinterface name](#) *string* [mep domain-id](#) *string* [association-id](#) *string* [mep-id](#) *number*

**Range** 1 to 8191

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### custom-mac-pool-name *string*

**Description** Name of the custom-mac-pool

**Context** [oam ethcfm mac-allocation network-instance name](#) *string* [subinterface name](#) *string* [mep domain-id](#) *string* [association-id](#) *string* [mep-id](#) *number* [custom-mac-pool-name](#) *string*

**Tree** [custom-mac-pool-name](#)

**String Length** 1 to 247

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### duplicate-mac *boolean*

**Description** Whether a MAC address is being reused in the same network instance



Value 'true' duplicate MAC addresses present in the network instance. Value 'false' all MAC addresses in the network instance are unique.

<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">duplicate-mac</a> <i>boolean</i>
<b>Tree</b>	<a href="#">duplicate-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index number**

<b>Description</b>	Index associated with the MAC address Only displayed for mac-allocated-type of 'custom-mac-pool' or 'system-mac-pool'.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac-address string**

<b>Description</b>	MAC address
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mac-allocated-type keyword**

<b>Description</b>	Method by which the active MAC address was selected
<b>Context</b>	<a href="#">oam ethcfm mac-allocation network-instance name</a> <i>string</i> <a href="#">subinterface name</a> <i>string</i> <a href="#">mep domain-id</a> <i>string</i> <a href="#">association-id</a> <i>string</i> <a href="#">mep-id</a> <i>number</i> <a href="#">mac-allocated-type</a> <i>keyword</i>

<b>Tree</b>	<a href="#">mac-allocated-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>port Maintenance Point (MP) MAC allocated using hardware MAC address of the Ethernet port</li> <li>custom-mac-pool Maintenance Point (MP) MAC allocated using custom-mac-pool</li> <li>system-mac-pool Maintenance Point (MP) MAC allocated using system-mac-pool</li> <li>custom-address Maintenance Point (MP) allocated using custom MAC address</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## system-mac-pool

<b>Description</b>	Enter the system-mac-pool context
<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool</a>
<b>Tree</b>	<a href="#">system-mac-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## count *number*

<b>Description</b>	Number of contiguous MAC addresses in the system pool Last byte of 'starting-mac' is incremented to create a list of unique MAC addresses for the pool.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool count <i>number</i></a>
<b>Tree</b>	<a href="#">count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-address [index number](#) [mac-address string](#)

<b>Description</b>	Add a list entry for mac-address
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<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool mac-address index number mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Index associated with the unicast MAC address
<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool mac-address index number mac-address string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac-address string**

<b>Description</b>	MAC address associated with the index
<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool mac-address index number mac-address string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**starting-mac string**

<b>Description</b>	First unicast MAC address of the pool Pool created by the system for the explicit use of ETHCFM MPs.
<b>Context</b>	<a href="#">oam ethcfm mac-allocation system-mac-pool starting-mac string</a>
<b>Tree</b>	<a href="#">starting-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sender-id**

<b>Description</b>	Enter the sender-id context
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<b>Context</b>	<a href="#">oam ethcfm sender-id</a>
<b>Tree</b>	<a href="#">sender-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **chassis-local-name** *string*

<b>Description</b>	Local name used for sender-id TLV chassis-component when chassis-type is 'local'  This configuration is mandatory when ../chassis-type value is 'local'. This configuration is optional when the ../chassis-type value is not 'local'. In the latter case the chassis-local-name is not used in the sender-id TLV
<b>Context</b>	<a href="#">oam ethcfm sender-id chassis-local-name</a> <i>string</i>
<b>Tree</b>	<a href="#">chassis-local-name</a>
<b>String Length</b>	1 to 45
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **chassis-type** *keyword*

<b>Description</b>	Selection of chassis-component type to be included in CFM PDUs
<b>Context</b>	<a href="#">oam ethcfm sender-id chassis-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">chassis-type</a>
<b>Default</b>	system
<b>Options</b>	<ul style="list-style-type: none"> <li>• system</li> <li>• local</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the ETH-CFM system level statistics context
<b>Context</b>	<a href="#">oam ethcfm statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-discards** *number*

**Description** Indicates the number of discarded ETH-CFM packets received on the node  
A packet may be discarded for several reasons including, but not limited to, malformed PDU, invalid TLVs, MEP admin down, etc.

**Context** [oam ethcfm statistics error-discards number](#)

**Tree** [error-discards](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **opcode** [opcode-name](#) *keyword*

**Description** Enter the CFM OpCode list instance

**Context** [oam ethcfm statistics opcode opcode-name keyword](#)

**Tree** [opcode](#)

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **opcode-name** *keyword*

**Description** The name that defines which CFM OpCode for the statistics

**Context** [oam ethcfm statistics opcode opcode-name keyword](#)

**Options**

- total
- other
- ccm
- lbr
- lbrm
- ltr
- ltrm
- ais
- lck
- tst

- laps
- raps
- mcc
- lmr
- lmm
- 1dm
- dmr
- dmm
- exr
- exm
- csf
- vsr
- vsm
- 1sl
- slr
- slm
- gnm

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received** *number*

**Description**

The total number of PDUs received with the specified OpCode

**Context**

[oam ethcfm statistics opcode opcode-name](#) keyword [received](#) *number*

**Tree**

[received](#)

**Default**

0

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transmitted** *number*

**Description**

The total number of PDUs transmitted with the specified OpCode

**Context**

[oam ethcfm statistics opcode opcode-name](#) keyword [transmitted](#) *number*

**Tree**

[transmitted](#)

**Default**

0

**Configurable**

False

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**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **receive-congestion-drops** *number*

**Description** Indicates the number of dropped ETH-CFM packets on the node in the receive direction  
A packet drop can be caused by resource contention.

**Context** [oam ethcfm statistics receive-congestion-drops](#) *number*

**Tree** [receive-congestion-drops](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **receive-count** *number*

**Description** Indicates the number of ETH-CFM packets received on the node

**Context** [oam ethcfm statistics receive-count](#) *number*

**Tree** [receive-count](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transmit-congestion-drops** *number*

**Description** Indicates the number of dropped ETH-CFM packets on the node in the transmit direction  
A packet drop can be caused by resource contention.

**Context** [oam ethcfm statistics transmit-congestion-drops](#) *number*

**Tree** [transmit-congestion-drops](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmit-count** *number*

<b>Description</b>	Indicates the number of ETH-CFM packets transmitted from the node
<b>Context</b>	<a href="#">oam ethcfm statistics transmit-count</a> <i>number</i>
<b>Tree</b>	<a href="#">transmit-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ippm**

<b>Description</b>	Context for IP Performance Measurement shared elements
<b>Context</b>	<a href="#">oam ippm</a>
<b>Tree</b>	<a href="#">ippm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-udp-port-pools**

<b>Description</b>	Context for source UDP port allocation to IPPM application
<b>Context</b>	<a href="#">oam ippm source-udp-port-pools</a>
<b>Tree</b>	<a href="#">source-udp-port-pools</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port** *port-number* *number*

<b>Description</b>	List of UDP ports
<b>Context</b>	<a href="#">oam ippm source-udp-port-pools port</a> <i>port-number</i> <i>number</i>
<b>Tree</b>	<a href="#">port</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**port-number** *number*

<b>Description</b>	UDP port number
<b>Context</b>	<a href="#">oam ippm source-udp-port-pools port port-number</a> <i>number</i>
<b>Range</b>	64374 to 64383
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**application-assignment** *keyword*

<b>Description</b>	IP Performance Measurement application assigned to the UDP port
<b>Context</b>	<a href="#">oam ippm source-udp-port-pools port port-number</a> <i>number</i> <a href="#">application-assignment</a> <i>keyword</i>
<b>Tree</b>	<a href="#">application-assignment</a>
<b>Default</b>	unassigned
<b>Options</b>	<ul style="list-style-type: none"> <li>oam-pm-ip Performance monitoring IP</li> <li>link-measurement Link Measurement</li> <li>unassigned No IPPM application assigned</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-use** *boolean*

<b>Description</b>	Referenced by an application test  When false no test is referencing the UDP port. When true a test is referencing the UDP port. The application assignment can only be changed when the value is false.
<b>Context</b>	<a href="#">oam ippm source-udp-port-pools port port-number</a> <i>number</i> <a href="#">in-use</a> <i>boolean</i>
<b>Tree</b>	<a href="#">in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## link-measurement

<b>Description</b>	Context for Link Measurement
<b>Context</b>	<a href="#">oam link-measurement</a>
<b>Tree</b>	<a href="#">link-measurement</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface *name string*

<b>Description</b>	List of interface names
<b>Context</b>	<a href="#">oam link-measurement interface name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## *name string*

<b>Description</b>	The interface name  This can be configured in one of two forms. Fully qualified reference to an interface subinterface, example ethernet-1/1.1, or symbolic alias, example interface-1. When the fully qualified name is specified the 'interface-ref' should not be configured. When the symbolic alias is specified the 'interface-ref' must be configured.
<b>Context</b>	<a href="#">oam link-measurement interface name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aggregate-newest-index *number*

<b>Description</b>	Index of the newest aggregate sample window for this subinterface
<b>Context</b>	<a href="#">oam link-measurement interface name string aggregate-newest-index number</a>
<b>Tree</b>	<a href="#">aggregate-newest-index</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip-auto-assigned** *boolean*

<b>Description</b>	Destination IP address auto assigned
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">destination-ip-auto-assigned</a> <i>boolean</i>
<b>Tree</b>	<a href="#">destination-ip-auto-assigned</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detectable-transmit-error** *keyword*

<b>Description</b>	Detectable error interrupting Link Measurement tests  Packet transmission is prevented for the following detectable transmit errors; subinterface-down, invalid-dest-ip, invalid-subinterface-type, same-source-ip-destination-ip.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">detectable-transmit-error</a> <i>keyword</i>
<b>Tree</b>	<a href="#">detectable-transmit-error</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• subinterface-down</li> <li>• unexpected-error</li> <li>• source-ip-not-local</li> <li>• invalid-dest-ip</li> <li>• subinterface-type-not-supported</li> <li>• same-source-ip-destination-ip</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dynamic-measurement**

<b>Description</b>	Context for Dynamic Measurement of IP interface
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement</a>

<b>Tree</b>	<a href="#">dynamic-measurement</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### link-measurement-template *reference*

<b>Description</b>	The link measurement template assigned to the subinterface
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement link-measurement-template</a> <i>reference</i>
<b>Tree</b>	<a href="#">link-measurement-template</a>
<b>Reference</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp

<b>Description</b>	Context for STAMP IP protocol configuration
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp</a>
<b>Tree</b>	<a href="#">stamp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4

<b>Description</b>	Context for ipv4 address configuration
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp</a> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Administrative state of STAMP IPv4 packets
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<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp</a> <a href="#">ipv4 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** *string*

<b>Description</b>	Unicast IPv4 destination address  When not specified and the primary local IP address has a prefix length of 30 or 31 the destination address will be the compliment. Otherwise, must be specified.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp</a> <a href="#">ipv4 destination-ip</a> <i>string</i>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-ip** *string*

<b>Description</b>	Unicast IPv4 source address  When not specified the primary local interface address will be used.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp</a> <a href="#">ipv4 source-ip</a> <i>string</i>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ipv6**

<b>Description</b>	Context for ipv6 address
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<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administrative state of STAMP IPv6 packets
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp ipv6</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** *string*

<b>Description</b>	Global unicast or link-local unicast IPv6 destination address When not specified the IPv6 destination discovery is an option for the measurement template.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp ipv6</a> <a href="#">destination-ip</a> <i>string</i>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-ip** *string*

<b>Description</b>	Global unicast or link-local unicast IPv6 source address When not specified the link-local interface address will be used.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">dynamic-measurement stamp ipv6</a> <a href="#">source-ip</a> <i>string</i>

<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-use-destination-udp-port** *number*

<b>Description</b>	Destination UDP port in use
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">in-use-destination-udp-port number</a>
<b>Tree</b>	<a href="#">in-use-destination-udp-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-use-source-udp-port** *number*

<b>Description</b>	Source UDP port in use
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">in-use-source-udp-port number</a>
<b>Tree</b>	<a href="#">in-use-source-udp-port</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface-ref**

<b>Description</b>	Reference to a subinterface If interface-ref is configured the ../interface/name will be considered as an alias regardless of its form.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">interface-ref</a>
<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface reference**

<b>Description</b>	Reference to a base interface
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">interface-ref interface reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface reference**

<b>Description</b>	Reference to a subinterface  This requires the base interface to be specified using the interface leaf in this container.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">interface-ref subinterface reference</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-reported-dynamic-delay** (*number* | *keyword*)

<b>Description</b>	Last delay measurement reported
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">last-reported-dynamic-delay</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">last-reported-dynamic-delay</a>
<b>Range</b>	0 to 2147483647
<b>Units</b>	microseconds
<b>Options</b>	<ul style="list-style-type: none"> <li>• none No value has been reported</li> </ul>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Operational state of link measurement on this interface
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting</li> </ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-destination-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Destination IP address used by STAMP test packets
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">operational-destination-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">operational-destination-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-failure** *keyword*

<b>Description</b>	Reason(s) why this interface's link measurement is operationally disabled
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">operational-failure</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operational-failure</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-protocol</li> <li>• template-admin-down</li> <li>• udp-port-unavailable</li> <li>• internal-error</li> <li>• subinterface-not-found-in-network-instance</li> <li>• network-instance-type-not-supported</li> <li>• subinterface-type-not-supported</li> <li>• no-template</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address used by STAMP test packets
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<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">operational-source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">operational-source-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### report-timestamp *string*

<b>Description</b>	Time a threshold event was last reported to the routing engine When <code>./last-reported-dynamic-delay &gt; 0</code> , <code>report-timestamp</code> holds the time at which <code>./last-reported-dynamic-delay</code> was reported to the routing engine. When <code>./last-reported-dynamic-delay = 0</code> , <code>report-timestamp</code> holds the time at which <code>./last-reported-dynamic-delay</code> was 'cleared' (because aging timer expired). When <code>./last-reported-dynamic-delay = 'none'</code> , <code>report-timestamp</code> holds '1970-Jan-01 00:00:00.0' UTC as a placeholder representing a delay has not yet been reported to the routing engine.
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">report-timestamp</a> <i>string</i>
<b>Tree</b>	<a href="#">report-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### report-triggered-by *keyword*

<b>Description</b>	Triggering event for the report
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">report-triggered-by</a> <i>keyword</i>
<b>Tree</b>	<a href="#">report-triggered-by</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• sample-threshold-absolute</li> <li>• sample-threshold-relative</li> <li>• aggregate-threshold-absolute</li> <li>• aggregate-threshold-relative</li> <li>• expired</li> <li>• reporting-disabled</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reporting *boolean*

**Description** IP interface reporting to the routing engine

**Context** [oam link-measurement interface name](#) *string* [reporting](#) *boolean*

**Tree** [reporting](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sample-newest-index *number*

**Description** Index of the newest sample window for this subinterface

**Context** [oam link-measurement interface name](#) *string* [sample-newest-index](#) *number*

**Tree** [sample-newest-index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-ip-auto-assigned *boolean*

**Description** Source IP address auto assigned

**Context** [oam link-measurement interface name](#) *string* [source-ip-auto-assigned](#) *boolean*

**Tree** [source-ip-auto-assigned](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-session-identifier *number*

**Description** Automatically generated Session Sender ID (SSID) assigned to the session

**Context** [oam link-measurement interface name](#) *string* [stamp-session-identifier](#) *number*

**Tree** [stamp-session-identifier](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Aggregate sample window information and sample window statistics

**Context** [oam link-measurement interface name](#) *string* [statistics](#)

**Tree** [statistics](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aggregate-sample-window

**Description** Context for aggregate sample window statistics  
Rolling buffer maintains the last 20 results.

**Context** [oam link-measurement interface name](#) *string* [statistics](#) [aggregate-sample-window](#)

**Tree** [aggregate-sample-window](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## index [index number](#)

**Description** The index list instance

**Context** [oam link-measurement interface name](#) *string* [statistics](#) [aggregate-sample-window](#) [index](#) [index number](#)

**Tree** [index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## index *number*

**Description** Index used to differentiate aggregate sample windows on the same subinterface

<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index</a> <i>index</i> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average** *number*

<b>Description</b>	Average delay measurement reported to the aggregate sample window
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index</a> <i>index</i> <i>number</i> <a href="#">average</a> <i>number</i>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-timestamp-utc** *string*

<b>Description</b>	Time (UTC) at which this aggregate sample window closed
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index</a> <i>index</i> <i>number</i> <a href="#">end-timestamp-utc</a> <i>string</i>
<b>Tree</b>	<a href="#">end-timestamp-utc</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**integrity** *boolean*

<b>Description</b>	Percentage of results meets integrity criteria
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index</a> <i>index</i> <i>number</i> <a href="#">integrity</a> <i>boolean</i>
<b>Tree</b>	<a href="#">integrity</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay measurement reported to the aggregate sample window
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index index</a> <i>number</i> <a href="#">maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay measurement reported to the aggregate sample window
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index index</a> <i>number</i> <a href="#">minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**result number**

<b>Description</b>	Delay being evaluated for reporting
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index index</a> <i>number</i> <a href="#">result number</a>
<b>Tree</b>	<a href="#">result</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sample-window-count number**

<b>Description</b>	Number of sample windows completed meeting integrity requirement
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics aggregate-sample-window index index</a> <i>number</i> <a href="#">sample-window-count number</a>

<b>Tree</b>	<a href="#">sample-window-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **window-state keyword**

<b>Description</b>	Enter the window-state context
<b>Context</b>	<a href="#">oam link-measurement interface name string statistics aggregate-sample-window index index number window-state keyword</a>
<b>Tree</b>	<a href="#">window-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• completed Window ran to completion</li> <li>• in-progress Window currently active</li> <li>• sw-reported Sample window threshold triggered report, aggregated sample window restarted</li> <li>• asw-reported Aggregate sample window threshold triggered report</li> <li>• terminated Window terminated prior to completion</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sample-window**

<b>Description</b>	Context for sample window statistics Rolling buffer maintains the last 50 results.
<b>Context</b>	<a href="#">oam link-measurement interface name string statistics sample-window</a>
<b>Tree</b>	<a href="#">sample-window</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**index** *index number*

<b>Description</b>	Index list instance
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	Index used to differentiate sample windows on the same subinterface
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average** *number*

<b>Description</b>	Average delay computed
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-packet-count** *number*

<b>Description</b>	Count of duplicate packets that have arrived during this sample window
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number duplicate-packet-count number</a>
<b>Tree</b>	<a href="#">duplicate-packet-count</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-timestamp-utc** *string*

**Description** Time (UTC) at which this sample window closed

**Context** [oam link-measurement interface name](#) *string* [statistics sample-window index index number](#) *end-timestamp-utc string*

**Tree** [end-timestamp-utc](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-count** *number*

**Description** Number of erroneous delay measurements that occurred in this sample window

**Context** [oam link-measurement interface name](#) *string* [statistics sample-window index index number](#) *error-count number*

**Tree** [error-count](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **integrity** *boolean*

**Description** Percentage of results meets integrity criteria

**Context** [oam link-measurement interface name](#) *string* [statistics sample-window index index number](#) *integrity boolean*

**Tree** [integrity](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay computed
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay computed
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-packets number**

<b>Description</b>	Number of STAMP packets received from the session-reflector
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number received-packets number</a>
<b>Tree</b>	<a href="#">received-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**result number**

<b>Description</b>	Delay evaluated for reporting
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index number result number</a>

<b>Tree</b>	<a href="#">result</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-malformed-flag-count *number*

<b>Description</b>	Count of packets in this sample window with the M (Malformed) bit set
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index</a> <i>number</i> <a href="#">stamp-malformed-flag-count</a> <i>number</i>
<b>Tree</b>	<a href="#">stamp-malformed-flag-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-unrecognized-flag-count *number*

<b>Description</b>	Number of packets in this sample window with the U (Unrecognized) bit set
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index</a> <i>number</i> <a href="#">stamp-unrecognized-flag-count</a> <i>number</i>
<b>Tree</b>	<a href="#">stamp-unrecognized-flag-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

<b>Description</b>	Number of STAMP packets transmitted to the session-reflector
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index</a> <i>number</i> <a href="#">transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**window-state** *keyword*

<b>Description</b>	Enter the window-state context
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index</a> <i>number</i> <a href="#">window-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">window-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>completed</b> Window ran to completion</li> <li>• <b>in-progress</b> Window currently active</li> <li>• <b>sw-reported</b> Sample window threshold triggered report, aggregated sample window restarted</li> <li>• <b>terminated</b> Window terminated prior to completion</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**zero-or-negative-delay-count** *number*

<b>Description</b>	Count of packets that have a zero or negative computed delay during this sample window
<b>Context</b>	<a href="#">oam link-measurement interface name</a> <i>string</i> <a href="#">statistics sample-window index index</a> <i>number</i> <a href="#">zero-or-negative-delay-count</a> <i>number</i>
<b>Tree</b>	<a href="#">zero-or-negative-delay-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measurement-template** [template-name](#) *string*

<b>Description</b>	List of measurement templates
<b>Context</b>	<a href="#">oam link-measurement measurement-template</a> <a href="#">template-name</a> <i>string</i>
<b>Tree</b>	<a href="#">measurement-template</a>
<b>Configurable</b>	True

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	255

### template-name *string*

<b>Description</b>	Measurement template name Modificaiton to bin-group attributes will cause associated tests to be terminated and restarted.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Administrative state of the measurement template.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### aggregate-sample-window

<b>Description</b>	Context for aggregate sample window The aggregate sample window is a collection of sample windows. It executes threshold comparisons based on the results in each sample window.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string aggregate-sample-window</a>
<b>Tree</b>	<a href="#">aggregate-sample-window</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multiplier *number*

**Description** Number of sample windows comprising the aggregate sample window

**Context** [oam link-measurement measurement-template template-name](#) *string*  
[aggregate-sample-window multiplier](#) *number*

**Tree** [multiplier](#)

**Range** 1 to 12

**Default** 12

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### threshold

**Description** Context for threshold configuration

**Context** [oam link-measurement measurement-template template-name](#) *string*  
[aggregate-sample-window threshold](#)

**Tree** [threshold](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### absolute *number*

**Description** Absolute change compared to previously reported result

**Context** [oam link-measurement measurement-template template-name](#) *string*  
[aggregate-sample-window threshold absolute](#) *number*

**Tree** [absolute](#)

**Range** 1 to 100000

**Units** microseconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**relative number**

<b>Description</b>	Percentage of change compared to previously reported result
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">aggregate-sample-window threshold relative</a> <i>number</i>
<b>Tree</b>	<a href="#">relative</a>
<b>Range</b>	1 to 100
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**window-integrity number**

<b>Description</b>	Required sample count to consider window integral  When not configured, results are compared to the configured thresholds regardless of sample count.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">aggregate-sample-window window-integrity</a> <i>number</i>
<b>Tree</b>	<a href="#">window-integrity</a>
<b>Range</b>	1 to 100
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay keyword**

<b>Description</b>	Delay measurement type of interest
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">delay</a> <i>keyword</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Default</b>	minimum
<b>Options</b>	<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> <li>• average</li> </ul>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

**Description** Text description for the measurement template

**Context** [oam link-measurement measurement-template template-name](#) *string* [description](#) *string*

**Tree** [description](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval** *number*

**Description** Interval between test packet transmissions

**Context** [oam link-measurement measurement-template template-name](#) *string* [interval](#) *number*

**Tree** [interval](#)

**Range** 1 to 10

**Default** 1

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-reported-dynamic-delay-hold** *number*

**Description** Wait time to flush the last reported delay after operational change  
This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state.  
When 0 the last reported delay is flushed immediately without delay.

**Context** [oam link-measurement measurement-template template-name](#) *string* [last-reported-dynamic-delay-hold](#) *number*

**Tree** [last-reported-dynamic-delay-hold](#)

**Range** 0 to 86400

<b>Default</b>	86400
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reporting *boolean*

<b>Description</b>	Report value reaching the threshold When true threshold events are reported to the routing engine. When false threshold events are not reported to the routing engine
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">reporting</a> <i>boolean</i>
<b>Tree</b>	<a href="#">reporting</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sample-window

<b>Description</b>	Context for sample window The sample window is a collection of individual test packet results. It executes threshold comparisons using the results in the sample window.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window</a>
<b>Tree</b>	<a href="#">sample-window</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multiplier *number*

<b>Description</b>	Defines the length of the measurement window, multiplier times interval
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">multiplier</a>
<b>Range</b>	1 to 900

<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## threshold

<b>Description</b>	Context for threshold configuration
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window threshold</a>
<b>Tree</b>	<a href="#">threshold</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## absolute *number*

<b>Description</b>	Absolute change compared to previously reported result
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window threshold absolute</a> <i>number</i>
<b>Tree</b>	<a href="#">absolute</a>
<b>Range</b>	1 to 100000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## relative *number*

<b>Description</b>	Percentage of change compared to previously reported result
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window threshold relative</a> <i>number</i>
<b>Tree</b>	<a href="#">relative</a>
<b>Range</b>	1 to 500
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**window-integrity** *number*

<b>Description</b>	Required sample count to consider window integral When not configured, results are compared to the configured thresholds regardless of sample count.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">sample-window window-integrity</a> <i>number</i>
<b>Tree</b>	<a href="#">window-integrity</a>
<b>Range</b>	1 to 100
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stamp**

<b>Description</b>	Context for STAMP options used by the measurement template
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp</a>
<b>Tree</b>	<a href="#">stamp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-udp-port** *number*

<b>Description</b>	Destination UDP port
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp</a> <a href="#">destination-udp-port</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-udp-port</a>
<b>Range</b>	1 to 65535
<b>Default</b>	862
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp** (*number | keyword*)

<b>Description</b>	DSCP value
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string stamp dscp</a> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Default</b>	CS6
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class** *reference*

<b>Description</b>	The forwarding class When value not specified, the sgt-qos value will be used
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6-destination-discovery**

<b>Description</b>	Context for IPv6 destination discovery Ping well-known multicast address ff02::2 (all routers) to solicit response from the peer. Use the source address in the response as the destination address in the STAMP test packets.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp ipv6-destination-discovery</a>
<b>Tree</b>	<a href="#">ipv6-destination-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state of IPv6 destination discovery
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp ipv6-destination-discovery admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discovery-interval *number*

**Description** Transmission frequency while in discovery phase

**Context** [oam link-measurement measurement-template template-name string stamp ipv6-destination-discovery discovery-interval number](#)

**Tree** [discovery-interval](#)

**Range** 1 to 10

**Default** 10

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discovery-timer *number*

**Description** Maximum time to remain in the discovery phase  
The discovery phase will end when the IPv6 peer is discovered or this timer expires.

**Context** [oam link-measurement measurement-template template-name string stamp ipv6-destination-discovery discovery-timer number](#)

**Tree** [discovery-timer](#)

**Range** 1 to 1800

**Default** 60

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### update-interval *number*

**Description** Transmission frequency to maintain the peer address after discovery phase completes  
When 0 no maintenance of the peer address once the discovery phase ends.

<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp ipv6-destination-discovery update-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">update-interval</a>
<b>Range</b>	0 to 3600
<b>Default</b>	600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pad-tlv-size** *number*

<b>Description</b>	Increase the STAMP PDU by including the PAD TLV
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp pad-tlv-size</a> <i>number</i>
<b>Tree</b>	<a href="#">pad-tlv-size</a>
<b>Range</b>	4 to 9714
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	The profile or drop precedence When value not specified, the sgt-qos value will be used
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name</a> <i>string</i> <a href="#">stamp profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in The second level priority profile</li> <li>• out The lowest level priority profile</li> <li>• exceed The third level priority profile</li> <li>• in-plus The highest priority profile</li> </ul>



<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## return-path

<b>Description</b>	Context for the STAMP return-path control
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string stamp return-path</a>
<b>Tree</b>	<a href="#">return-path</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## link *boolean*

<b>Description</b>	Include the Return Path sub-TLV specifying link
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string stamp return-path link boolean</a>
<b>Tree</b>	<a href="#">link</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## source-udp-port *number*

<b>Description</b>	Automatically allocate or statically configure the source UDP port When 0 source UDP Port will automatically select an available source UDP port from the dynamic range. Configuring a specific value requires the UDP port to be assigned to the link-measurement application /oam ippm source-udp-port-pools port application-assignment.
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string stamp source-udp-port number</a>
<b>Tree</b>	<a href="#">source-udp-port</a>
<b>Range</b>	0   64374 to 64383
<b>Default</b>	0

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ttl number**

<b>Description</b>	Time to live
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string stamp ttl number</a>
<b>Tree</b>	<a href="#">ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unidirectional-measurement keyword**

<b>Description</b>	Method used to compute the forward unidirectional delay value
<b>Context</b>	<a href="#">oam link-measurement measurement-template template-name string unidirectional-measurement keyword</a>
<b>Tree</b>	<a href="#">unidirectional-measurement</a>
<b>Default</b>	derived
<b>Options</b>	<ul style="list-style-type: none"> <li>derived           <ul style="list-style-type: none"> <li>Computes forward unidirectional measurement using round-trip divide by 2</li> </ul> </li> <li>actual           <ul style="list-style-type: none"> <li>Computes forward unidirectional measurements using (T2-T1)</li> </ul> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsp-ping**

<b>Description</b>	Container of last ping results for different MPLS and segment routing tunnels
<b>Context</b>	<a href="#">oam lsp-ping</a>
<b>Tree</b>	<a href="#">lsp-ping</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ldp

<b>Description</b>	Container of LSP ping results for different LDP tunnels
<b>Context</b>	<a href="#">oam lsp-ping ldp</a>
<b>Tree</b>	<a href="#">ldp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the fec list instance
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The IPv4 or IPv6 prefix associated with the fec This is the destination that was pinged.
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## session-id [id number](#)

<b>Description</b>	List of recent sessions (up to 10) with saved LSP ping results for the prefix
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a>
<b>Tree</b>	<a href="#">session-id</a>
<b>Configurable</b>	False

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

**id number**

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-destination**

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-address (ipv4-address | ipv6-address)**

<b>Description</b>	IP address of the path destination
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination ip-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop (ipv4-address | ipv6-address)**

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination next-hop (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">next-hop</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *string*

<b>Description</b>	Egress router sub-interface used with the path destination
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">session-id id number</a> <a href="#">path-destination subinterface string</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sequence [sequence-id number](#)

<b>Description</b>	List of probes sent during the test
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">session-id id number</a> <a href="#">sequence sequence-id number</a>
<b>Tree</b>	<a href="#">sequence</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sequence-id *number*

<b>Description</b>	Sequence ID of the probe, starting with 1 and incrementing by 1
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">session-id id number</a> <a href="#">sequence sequence-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-interface *string*

<b>Description</b>	The subinterface that was used to transmit the echo-request message
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<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number out-interface string</a>
<b>Tree</b>	<a href="#">out-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-size *number*

<b>Description</b>	The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number probe-size number</a>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reply

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply</a>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mpls-ttl *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply mpls-ttl number</a>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received** *boolean*

<b>Description</b>	Reads true if the reply message was received
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply received</a> <i>boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-sender** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply reply-sender (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply return-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>no-return-code</li> <li>malformed-echo-request-received</li> <li>one-or-more-tlvs-not-understood</li> <li>replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>downstream-mapping-mismatch</li> </ul>

- upstream-interface-index-unknown
- reserved
- label-switched-at-stack-depth-n
- label-switched-but-no-MPLS-at-stack-depth-n
- fec-does-not-use-given-label-at-stack-depth-n
- no-label-entry-at-stack-depth-n
- protocol-unavailable-at-stack-depth-n
- premature-termination
- ddmapi-tlv-has-return-code-subcode-details
- label-switched-with-fec-change

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### return-subcode *number*

<b>Description</b>	Return subcode in the echo-reply
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply return-subcode number</a>
<b>Tree</b>	<a href="#">return-subcode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### round-trip-time *number*

<b>Description</b>	The round trip-time between the request and reply for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply round-trip-time number</a>
<b>Tree</b>	<a href="#">round-trip-time</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**udp-data-length** *number*

<b>Description</b>	The length of the UDP payload
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply udp-data-length number</a>
<b>Tree</b>	<a href="#">udp-data-length</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-sent** *boolean*

<b>Description</b>	True when it is possible for the datapath to send the request message
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number request-sent boolean</a>
<b>Tree</b>	<a href="#">request-sent</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-failure-reason** *keyword*

<b>Description</b>	Indicates the reason why the OAM manager could not send the request message
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number send-failure-reason keyword</a>
<b>Tree</b>	<a href="#">send-failure-reason</a>
<b>Default</b>	no errors
<b>Options</b>	<ul style="list-style-type: none"> <li>• timeout</li> <li>• source-ip-not-local</li> <li>• invalid-prefix</li> <li>• sr-prefix-is-local</li> <li>• ldp-prefix-is-local</li> <li>• invalid-dest-ip</li> <li>• dest-address-type-mismatch</li> </ul>

- next-hop-ip-not-found
- next-hop-if-name-not-found
- packet-size-too-big
- far-end-unreachable
- prefix-unknown
- ds-map-not-supported
- unexpected-error
- no errors

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics****Description**

Summary statistics for the test

**Context**[oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) session-id id number statistics](#)**Tree**[statistics](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip-time****Description**

Statistics for the round trip time, considering all the probes sent in the test

**Context**[oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) session-id id number statistics round-trip-time](#)**Tree**[round-trip-time](#)**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number****Description**

The average round trip-time across all probes

**Context**[oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) session-id id number statistics round-trip-time average number](#)**Tree**[average](#)

<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum *number*

<b>Description</b>	The maximum round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minimum *number*

<b>Description</b>	The minimum round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### standard-deviation *number*

<b>Description</b>	The standard deviation of the round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time standard-deviation number</a>
<b>Tree</b>	<a href="#">standard-deviation</a>
<b>Default</b>	0

<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-active** *boolean*

<b>Description</b>	Indicates if the test is still running (true) or not (false)
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number test-active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">test-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-isis**

<b>Description</b>	Container of LSP ping results for different SR-ISIS tunnels
<b>Context</b>	<a href="#">oam lsp-ping sr-isis</a>
<b>Tree</b>	<a href="#">sr-isis</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid** [prefix \(ipv4-prefix | ipv6-prefix\)](#)

<b>Description</b>	Enter the prefix-sid list instance
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** [\(ipv4-prefix | ipv6-prefix\)](#)

<b>Description</b>	The IPv4 or IPv6 prefix associated with the SID This is the destination that was pinged.
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<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-id [id number](#)

<b>Description</b>	List of recent sessions (up to 10) with saved LSP ping results for the prefix
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a>
<b>Tree</b>	<a href="#">session-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### id [number](#)

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### path-destination

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the path destination
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<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number path-destination ip-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number path-destination next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subinterface** *string*

<b>Description</b>	Egress router sub-interface used with the path destination
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number path-destination subinterface</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence** [sequence-id](#) *number*

<b>Description</b>	List of probes sent during the test
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number sequence</a> <a href="#">sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">sequence</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sequence-id *number***

<b>Description</b>	Sequence ID of the probe, starting with 1 and incrementing by 1
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-interface *string***

<b>Description</b>	The subinterface that was used to transmit the echo-request message
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number out-interface string</a>
<b>Tree</b>	<a href="#">out-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-size *number***

<b>Description</b>	The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number probe-size number</a>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply**

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply</a>
<b>Tree</b>	<a href="#">reply</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-ttl** *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply mpls-ttl number</a>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **received** *boolean*

<b>Description</b>	Reads true if the reply message was received
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply received boolean</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reply-sender** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply reply-sender (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply return-code keyword</a>
<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>no-return-code</li> <li>malformed-echo-request-received</li> <li>one-or-more-tlvs-not-understood</li> <li>replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>downstream-mapping-mismatch</li> <li>upstream-interface-index-unknown</li> <li>reserved</li> <li>label-switched-at-stack-depth-n</li> <li>label-switched-but-no-MPLS-at-stack-depth-n</li> <li>fec-does-not-use-given-label-at-stack-depth-n</li> <li>no-label-entry-at-stack-depth-n</li> <li>protocol-unavailable-at-stack-depth-n</li> <li>premature-termination</li> <li>ddmap-tlv-has-return-code-subcode-details</li> <li>label-switched-with-fec-change</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**return-subcode** *number*

<b>Description</b>	Return subcode in the echo-reply
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number reply return-subcode number</a>
<b>Tree</b>	<a href="#">return-subcode</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### round-trip-time *number*

**Description** The round trip-time between the request and reply for this sequence number or hop

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number sequence sequence-id number reply round-trip-time number](#)

**Tree** [round-trip-time](#)

**Default** 0

**Units** microseconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### udp-data-length *number*

**Description** The length of the UDP payload

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number sequence sequence-id number reply udp-data-length number](#)

**Tree** [udp-data-length](#)

**Default** 0

**Units** bytes

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### request-sent *boolean*

**Description** True when it is possible for the datapath to send the request message

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number sequence sequence-id number request-sent boolean](#)

**Tree** [request-sent](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-failure-reason** *keyword*

<b>Description</b>	Indicates the reason why the OAM manager could not send the request message
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number sequence sequence-id number send-failure-reason keyword</a>
<b>Tree</b>	<a href="#">send-failure-reason</a>
<b>Default</b>	no errors
<b>Options</b>	<ul style="list-style-type: none"> <li>• timeout</li> <li>• source-ip-not-local</li> <li>• invalid-prefix</li> <li>• sr-prefix-is-local</li> <li>• ldp-prefix-is-local</li> <li>• invalid-dest-ip</li> <li>• dest-address-type-mismatch</li> <li>• next-hop-ip-not-found</li> <li>• next-hop-if-name-not-found</li> <li>• packet-size-too-big</li> <li>• far-end-unreachable</li> <li>• prefix-unknown</li> <li>• ds-map-not-supported</li> <li>• unexpected-error</li> <li>• no errors</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Summary statistics for the test
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip-time**

<b>Description</b>	Statistics for the round trip time, considering all the probes sent in the test
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time</a>
<b>Tree</b>	<a href="#">round-trip-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number**

<b>Description</b>	The average round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	The maximum round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	The minimum round trip-time across all probes
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<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### standard-deviation *number*

<b>Description</b>	The standard deviation of the round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number statistics round-trip-time standard-deviation number</a>
<b>Tree</b>	<a href="#">standard-deviation</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-active *boolean*

<b>Description</b>	Indicates if the test is still running (true) or not (false)
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number test-active boolean</a>
<b>Tree</b>	<a href="#">test-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-policy

<b>Description</b>	Parameters required to ping the endpoint of a TE-Policy tunnel
<b>Context</b>	<a href="#">oam lsp-ping te-policy</a>
<b>Tree</b>	<a href="#">te-policy</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sr-uncolored

**Description** Enter the sr-uncolored context

**Context** [oam lsp-ping te-policy sr-uncolored](#)

**Tree** [sr-uncolored](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy [policy-name string protocol-origin keyword](#)

**Description** Enter the policy list instance

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword](#)

**Tree** [policy](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy-name [string](#)

**Description** Name of Uncolored Traffic Engineering Policy to be tested. Any available primary or standby or active secondary candidate-path can be probed.

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword](#)

**String Length** 1 to 255

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## protocol-origin [keyword](#)

**Description** Uncolored Traffic Engineering Policy, origination source. The method Policy path is computed. This list includes Path Computation Engine, explicitly configured paths, etc.

<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pcep PCEP used as signalling mechanism for the candidate path</li> <li>• bgp BGP used as signalling mechanism for the candidate path</li> <li>• local Management interface used for candidate path instantiation</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-id [id](#) *number*

<b>Description</b>	List of recent sessions (up to 10) with saved LSP ping results for the prefix
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id</a> <a href="#">id</a> <i>number</i>
<b>Tree</b>	<a href="#">session-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### id *number*

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id</a> <a href="#">id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### path-destination

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id</a> <a href="#">id</a> <i>number</i> <a href="#">path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ip-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the path destination
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number path-destination ip-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number path-destination next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **subinterface** *string*

<b>Description</b>	Egress router sub-interface used with the path destination
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number path-destination subinterface string</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**sequence** *sequence-id number*

<b>Description</b>	List of probes sent during the test
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number</a>
<b>Tree</b>	<a href="#">sequence</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sequence-id** *number*

<b>Description</b>	Sequence ID of the probe, starting with 1 and incrementing by 1
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-interface** *string*

<b>Description</b>	The subinterface that was used to transmit the echo-request message
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number out-interface string</a>
<b>Tree</b>	<a href="#">out-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number probe-size number</a>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500

<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## reply

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number sequence sequence-id number</a> <i>reply</i>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls-ttl *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number sequence sequence-id number</a> <i>reply mpls-ttl number</i>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## received *boolean*

<b>Description</b>	Reads true if the reply message was received
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number sequence sequence-id number</a> <i>reply received boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-sender** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number reply reply-sender (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number reply return-code keyword</a>
<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>no-return-code</li> <li>malformed-echo-request-received</li> <li>one-or-more-tlvs-not-understood</li> <li>replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>downstream-mapping-mismatch</li> <li>upstream-interface-index-unknown</li> <li>reserved</li> <li>label-switched-at-stack-depth-n</li> <li>label-switched-but-no-MPLS-at-stack-depth-n</li> <li>fec-does-not-use-given-label-at-stack-depth-n</li> <li>no-label-entry-at-stack-depth-n</li> <li>protocol-unavailable-at-stack-depth-n</li> <li>premature-termination</li> <li>ddmap-tlv-has-return-code-subcode-details</li> <li>label-switched-with-fec-change</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### return-subcode *number*

**Description** Return subcode in the echo-reply

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number reply return-subcode number](#)

**Tree** [return-subcode](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### round-trip-time *number*

**Description** The round trip-time between the request and reply for this sequence number or hop

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number reply round-trip-time number](#)

**Tree** [round-trip-time](#)

**Default** 0

**Units** microseconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### udp-data-length *number*

**Description** The length of the UDP payload

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number sequence sequence-id number reply udp-data-length number](#)

**Tree** [udp-data-length](#)

**Default** 0

**Units** bytes

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-sent** *boolean*

**Description** True when it is possible for the datapath to send the request message

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name](#) *string* [protocol-origin keyword session-id id](#) *number* [sequence sequence-id](#) *number* [request-sent boolean](#)

**Tree** [request-sent](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **send-failure-reason** *keyword*

**Description** Indicates the reason why the OAM manager could not send the request message

**Context** [oam lsp-ping te-policy sr-uncolored policy policy-name](#) *string* [protocol-origin keyword session-id id](#) *number* [sequence sequence-id](#) *number* [send-failure-reason keyword](#)

**Tree** [send-failure-reason](#)

**Default** no errors

**Options**

- timeout
- source-ip-not-local
- invalid-prefix
- sr-prefix-is-local
- ldp-prefix-is-local
- invalid-dest-ip
- dest-address-type-mismatch
- next-hop-ip-not-found
- next-hop-if-name-not-found
- packet-size-too-big
- far-end-unreachable
- prefix-unknown
- ds-map-not-supported
- unexpected-error
- no errors

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Summary statistics for the test
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## round-trip-time

<b>Description</b>	Statistics for the round trip time, considering all the probes sent in the test
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics round-trip-time</a>
<b>Tree</b>	<a href="#">round-trip-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## average *number*

<b>Description</b>	The average round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics round-trip-time average</a> <i>number</i>
<b>Tree</b>	<a href="#">average</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum** *number*

<b>Description</b>	The maximum round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics round-trip-time maximum</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum** *number*

<b>Description</b>	The minimum round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics round-trip-time minimum</a> <i>number</i>
<b>Tree</b>	<a href="#">minimum</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**standard-deviation** *number*

<b>Description</b>	The standard deviation of the round trip-time across all probes
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">statistics round-trip-time standard-deviation</a> <i>number</i>
<b>Tree</b>	<a href="#">standard-deviation</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-active** *boolean*

<b>Description</b>	Indicates if the test is still running (true) or not (false)
<b>Context</b>	<a href="#">oam lsp-ping</a> <a href="#">te-policy</a> <a href="#">sr-uncolored</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id</a> <a href="#">id</a> <i>number</i> <a href="#">test-active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">test-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsp-trace**

<b>Description</b>	Container of last trace results for different MPLS and segment routing tunnels
<b>Context</b>	<a href="#">oam lsp-trace</a>
<b>Tree</b>	<a href="#">lsp-trace</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ldp**

<b>Description</b>	Container of LSP trace results for different LDP tunnels
<b>Context</b>	<a href="#">oam lsp-trace</a> <a href="#">ldp</a>
<b>Tree</b>	<a href="#">ldp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**fec** [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Enter the fec list instance
<b>Context</b>	<a href="#">oam lsp-trace</a> <a href="#">ldp</a> <a href="#">fec</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">fec</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The IPv4 or IPv6 prefix associated with the fec This is the destination that was traced.
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-id id number**

<b>Description</b>	List of recent sessions (up to 10) with saved LSP trace results for the prefix
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a>
<b>Tree</b>	<a href="#">session-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

**id number**

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hop hop-index number**

<b>Description</b>	List of hops traced
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">hop hop-index number</a>
<b>Tree</b>	<a href="#">hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hop-index** *number*

<b>Description</b>	The hop index, starting at minimum-mpls-ttl and incrementing by 1 up to maximum-mpls-ttl or until the destination is reached
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id</a> <a href="#">number</a> <a href="#">hop hop-index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe** [probe-index](#) *number*

<b>Description</b>	Probes sent to a given hop
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id</a> <a href="#">number</a> <a href="#">hop hop-index</a> <a href="#">number</a> <a href="#">probe probe-index</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">probe</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-index** *number*

<b>Description</b>	The probe index, probes received from a given hop. A given LSR may respond one than once, typically once with EgressRouter and once with Destination Router Match Label identifier
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id</a> <a href="#">number</a> <a href="#">hop hop-index</a> <a href="#">number</a> <a href="#">probe probe-index</a> <a href="#">number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-detailed-mapping** [id](#) *number*

<b>Description</b>	List of DDMAP TLVs included in the echo-reply from this hop The first one (with id 1) will be used by the sender.
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id</a> <a href="#">number</a> <a href="#">hop hop-index</a> <a href="#">number</a> <a href="#">probe probe-index</a> <a href="#">number</a> <a href="#">downstream-detailed-mapping id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">downstream-detailed-mapping</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	Identifier of the DDMAP TLV
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address-type keyword**

<b>Description</b>	Indicates the addressing of the downstream interface
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number address-type keyword</a>
<b>Tree</b>	<a href="#">address-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4-numbered</li> <li>• ipv4-unnumbered</li> <li>• ipv6-numbered</li> <li>• ipv6-unnumbered</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-interface-address (ipv4-address | ipv6-address)**

<b>Description</b>	The interface address of the next-hop router
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number downstream-interface-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">downstream-interface-address</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **downstream-router-address** (*ipv4-address* | *ipv6-address*)

**Description** The router ID or interface address of the next-hop router

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number downstream-router-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [downstream-router-address](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-label** *index number*

**Description** List of labels in the label stack that would have appeared if this router were forwarding the packet through this downstream interface

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number](#)

**Tree** [mpls-label](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *number*

**Description** Index of label stack entry, starting at 1 (topmost label)

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **label** (*number* | *keyword*)

**Description** MPLS label value

<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number label (number   keyword)</a>
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol** *keyword*

<b>Description</b>	The label distribution protocol for the downstream label
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number protocol keyword</a>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	unknown
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• static</li> <li>• bgp</li> <li>• ldp</li> <li>• rsvp-te</li> <li>• ospf</li> <li>• isis</li> <li>• ospfv3</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mtu** *number*

<b>Description</b>	The size in octets of the largest MPLS frame (including label stack) that fits on this downstream interface
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<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mtu number</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-probe-send-failure-reason** *keyword*

<b>Description</b>	Indicates the reason why the OAM manager could not send the request message
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number last-probe-send-failure-reason keyword</a>
<b>Tree</b>	<a href="#">last-probe-send-failure-reason</a>
<b>Default</b>	no errors
<b>Options</b>	<ul style="list-style-type: none"> <li>• timeout</li> <li>• source-ip-not-local</li> <li>• invalid-prefix</li> <li>• sr-prefix-is-local</li> <li>• ldp-prefix-is-local</li> <li>• invalid-dest-ip</li> <li>• dest-address-type-mismatch</li> <li>• next-hop-ip-not-found</li> <li>• next-hop-if-name-not-found</li> <li>• packet-size-too-big</li> <li>• far-end-unreachable</li> <li>• prefix-unknown</li> <li>• ds-map-not-supported</li> <li>• unexpected-error</li> <li>• no errors</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number probe-size number</a>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probes-sent** *number*

<b>Description</b>	The number of echo-request messages sent to the hop until a reply was received
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number probes-sent number</a>
<b>Tree</b>	<a href="#">probes-sent</a>
<b>Range</b>	1 to 10
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply**

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply</a>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-ttl** *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply mpls-ttl number</a>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received** *boolean*

<b>Description</b>	Reads true if the reply message was received
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply received boolean</a>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-sender** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply reply-sender (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply return-code keyword</a>



<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>no-return-code</li> <li>malformed-echo-request-received</li> <li>one-or-more-tlvs-not-understood</li> <li>replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>downstream-mapping-mismatch</li> <li>upstream-interface-index-unknown</li> <li>reserved</li> <li>label-switched-at-stack-depth-n</li> <li>label-switched-but-no-MPLS-at-stack-depth-n</li> <li>fec-does-not-use-given-label-at-stack-depth-n</li> <li>no-label-entry-at-stack-depth-n</li> <li>protocol-unavailable-at-stack-depth-n</li> <li>premature-termination</li> <li>ddmap-tlv-has-return-code-subcode-details</li> <li>label-switched-with-fec-change</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **return-subcode** *number*

<b>Description</b>	Return subcode in the echo-reply
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">hop hop-index number</a> <a href="#">probe probe-index number</a> <a href="#">reply return-subcode number</a>
<b>Tree</b>	<a href="#">return-subcode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip-time** *number*

<b>Description</b>	The round trip-time between the request and reply for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply round-trip-time number</a>
<b>Tree</b>	<a href="#">round-trip-time</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**udp-data-length** *number*

<b>Description</b>	The length of the UDP payload
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply udp-data-length number</a>
<b>Tree</b>	<a href="#">udp-data-length</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-destination**

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the path destination
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">path-destination ip-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">path-destination next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *string*

<b>Description</b>	Egress router sub-interface used with the path destination
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">path-destination subinterface</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-active** *boolean*

<b>Description</b>	Indicates if the test is still running (true) or not (false)
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">session-id id number</a> <a href="#">test-active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">test-active</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sr-isis

**Description** Container of LSP trace results for different SR-ISIS tunnels

**Context** [oam lsp-trace sr-isis](#)

**Tree** [sr-isis](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix-sid [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the prefix-sid list instance

**Context** [oam lsp-trace sr-isis prefix-sid \[prefix\]\(#\) \(\*ipv4-prefix\* | \*ipv6-prefix\*\)](#)

**Tree** [prefix-sid](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Description** The IPv4 or IPv6 prefix associated with the SID  
This is the destination that was traced.

**Context** [oam lsp-trace sr-isis prefix-sid \[prefix\]\(#\) \(\*ipv4-prefix\* | \*ipv6-prefix\*\)](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## session-id [id number](#)

**Description** List of recent sessions (up to 10) with saved LSP trace results for the prefix

**Context** [oam lsp-trace sr-isis prefix-sid \[prefix\]\(#\) \(\*ipv4-prefix\* | \*ipv6-prefix\*\) \[session-id \\[id number\\]\\(#\\)\]\(#\)](#)

**Tree** [session-id](#)

**Configurable** False

<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

**id** *number*

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hop** [hop-index](#) *number*

<b>Description</b>	List of hops traced
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number</a> <a href="#">hop hop-index number</a>
<b>Tree</b>	<a href="#">hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hop-index** *number*

<b>Description</b>	The hop index, starting at minimum-mpls-ttl and incrementing by 1 up to maximum-mpls-ttl or until the destination is reached
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number</a> <a href="#">hop hop-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe** [probe-index](#) *number*

<b>Description</b>	Probes sent to a given hop
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number</a> <a href="#">hop hop-index number</a> <a href="#">probe probe-index number</a>
<b>Tree</b>	<a href="#">probe</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-index *number*

<b>Description</b>	The probe index, probes received from a given hop. A given LSR may respond one than once, typically once with EgressRouter and once with Destination Router Match Label identifier
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### downstream-detailed-mapping *id number*

<b>Description</b>	List of DDMAP TLVs included in the echo-reply from this hop The first one (with id 1) will be used by the sender.
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number</a>
<b>Tree</b>	<a href="#">downstream-detailed-mapping</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### id *number*

<b>Description</b>	Identifier of the DDMAP TLV
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address-type keyword**

<b>Description</b>	Indicates the addressing of the downstream interface
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number address-type keyword</a>
<b>Tree</b>	<a href="#">address-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4-numbered</li> <li>• ipv4-unnumbered</li> <li>• ipv6-numbered</li> <li>• ipv6-unnumbered</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-interface-address (ipv4-address | ipv6-address)**

<b>Description</b>	The interface address of the next-hop router
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number downstream-interface-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">downstream-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-router-address (ipv4-address | ipv6-address)**

<b>Description</b>	The router ID or interface address of the next-hop router
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number downstream-router-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">downstream-router-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-label index number**

<b>Description</b>	List of labels in the label stack that would have appeared if this router were forwarding the packet through this downstream interface
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number</a>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Index of label stack entry, starting at 1 (topmost label)
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label (number | keyword)**

<b>Description</b>	MPLS label value
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number label (number   keyword)</a>
<b>Tree</b>	<a href="#">label</a>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**protocol** *keyword*

<b>Description</b>	The label distribution protocol for the downstream label
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number protocol keyword</a>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	unknown
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• static</li> <li>• bgp</li> <li>• ldp</li> <li>• rsvp-te</li> <li>• ospf</li> <li>• isis</li> <li>• ospfv3</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mtu** *number*

<b>Description</b>	The size in octets of the largest MPLS frame (including label stack) that fits on this downstream interface
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mtu number</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-probe-send-failure-reason** *keyword*

<b>Description</b>	Indicates the reason why the OAM manager could not send the request message
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<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number last-probe-send-failure-reason keyword</a>
<b>Tree</b>	<a href="#">last-probe-send-failure-reason</a>
<b>Default</b>	no errors
<b>Options</b>	<ul style="list-style-type: none"> <li>• timeout</li> <li>• source-ip-not-local</li> <li>• invalid-prefix</li> <li>• sr-prefix-is-local</li> <li>• ldp-prefix-is-local</li> <li>• invalid-dest-ip</li> <li>• dest-address-type-mismatch</li> <li>• next-hop-ip-not-found</li> <li>• next-hop-if-name-not-found</li> <li>• packet-size-too-big</li> <li>• far-end-unreachable</li> <li>• prefix-unknown</li> <li>• ds-map-not-supported</li> <li>• unexpected-error</li> <li>• no errors</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number probe-size number</a>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probes-sent** *number*

<b>Description</b>	The number of echo-request messages sent to the hop until a reply was received
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number probes-sent number</a>
<b>Tree</b>	<a href="#">probes-sent</a>
<b>Range</b>	1 to 10
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply**

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply</a>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-ttl** *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply mpls-ttl number</a>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received** *boolean*

<b>Description</b>	Reads true if the reply message was received
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<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply received</a> <i>boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reply-sender** (*ipv4-address | ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply reply-sender (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply return-code keyword</a>
<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>no-return-code</li> <li>malformed-echo-request-received</li> <li>one-or-more-tlvs-not-understood</li> <li>replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>downstream-mapping-mismatch</li> <li>upstream-interface-index-unknown</li> <li>reserved</li> <li>label-switched-at-stack-depth-n</li> <li>label-switched-but-no-MPLS-at-stack-depth-n</li> <li>fec-does-not-use-given-label-at-stack-depth-n</li> </ul>

- no-label-entry-at-stack-depth-n
- protocol-unavailable-at-stack-depth-n
- premature-termination
- ddmapi-tlv-has-return-code-subcode-details
- label-switched-with-fec-change

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### return-subcode *number*

**Description** Return subcode in the echo-reply

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number hop hop-index number probe probe-index number reply return-subcode number](#)

**Tree** [return-subcode](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### round-trip-time *number*

**Description** The round trip-time between the request and reply for this sequence number or hop

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number hop hop-index number probe probe-index number reply round-trip-time number](#)

**Tree** [round-trip-time](#)

**Default** 0

**Units** microseconds

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### udp-data-length *number*

**Description** The length of the UDP payload

<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number hop hop-index number probe probe-index number reply udp-data-length number</a>
<b>Tree</b>	<a href="#">udp-data-length</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### path-destination

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-address (*ipv4-address | ipv6-address*)

<b>Description</b>	IP address of the path destination
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination ip-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop (*ipv4-address | ipv6-address*)

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) session-id id number path-destination next-hop (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *string*

**Description** Egress router sub-interface used with the path destination

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number path-destination subinterface string](#)

**Tree** [subinterface](#)

**String Length** 5 to 25

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-active *boolean*

**Description** Indicates if the test is still running (true) or not (false)

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) session-id id number test-active boolean](#)

**Tree** [test-active](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-policy

**Description** Parameters required to trace the endpoint of a TE-Policy tunnel

**Context** [oam lsp-trace te-policy](#)

**Tree** [te-policy](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-uncolored

**Description** Enter the sr-uncolored context

**Context** [oam lsp-trace te-policy sr-uncolored](#)

**Tree** [sr-uncolored](#)

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy** *policy-name string protocol-origin keyword*

<b>Description</b>	Enter the policy list instance
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy-name** *string*

<b>Description</b>	Name of Uncolored Traffic Engineering Policy which is to be traced. Any available primary or standby or active secondary candidate-path can be traced.
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol-origin** *keyword*

<b>Description</b>	Uncolored Traffic Engineering Policy, origination source. The method Policy path is computed. This list includes Path Computation Engine, explicitly configured paths, etc.
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pcep PCEP used as signalling mechanism for the candidate path</li> <li>• bgp BGP used as signalling mechanism for the candidate path</li> <li>• local Management interface used for candidate path instantiation</li> </ul>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-id *id number*

<b>Description</b>	List of recent sessions (up to 10) with saved LSP trace results for the prefix
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number</a>
<b>Tree</b>	<a href="#">session-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	10

### id *number*

<b>Description</b>	The system-assigned session ID
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop [hop-index](#) *number*

<b>Description</b>	List of hops traced
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number hop hop-index number</a>
<b>Tree</b>	<a href="#">hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hop-index *number*

<b>Description</b>	The hop index, starting at minimum-mpls-ttl and incrementing by 1 up to maximum-mpls-ttl or until the destination is reached
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<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number hop hop-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe [probe-index number](#)

<b>Description</b>	Probes sent to a given hop
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number hop hop-index number probe probe-index number</a>
<b>Tree</b>	<a href="#">probe</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-index *number*

<b>Description</b>	The probe index, probes received from a given hop. A given LSR may respond one than once, typically once with EgressRouter and once with Destination Router Match Label identifier
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number hop hop-index number probe probe-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### downstream-detailed-mapping [id number](#)

<b>Description</b>	List of DDMAP TLVs included in the echo-reply from this hop The first one (with id 1) will be used by the sender.
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number</a>
<b>Tree</b>	<a href="#">downstream-detailed-mapping</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	Identifier of the DDMAP TLV
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address-type keyword**

<b>Description</b>	Indicates the addressing of the downstream interface
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number address-type keyword</a>
<b>Tree</b>	<a href="#">address-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4-numbered</li> <li>• ipv4-unnumbered</li> <li>• ipv6-numbered</li> <li>• ipv6-unnumbered</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-interface-address (ipv4-address | ipv6-address)**

<b>Description</b>	The interface address of the next-hop router
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number downstream-interface-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">downstream-interface-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**downstream-router-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The router ID or interface address of the next-hop router
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">downstream-detailed-mapping id</a> <i>number</i> <a href="#">downstream-router-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">downstream-router-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-label** *index number*

<b>Description</b>	List of labels in the label stack that would have appeared if this router were forwarding the packet through this downstream interface
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">downstream-detailed-mapping id</a> <i>number</i> <a href="#">mpls-label index</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-label</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	Index of label stack entry, starting at 1 (topmost label)
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">downstream-detailed-mapping id</a> <i>number</i> <a href="#">mpls-label index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label** (*number* | *keyword*)

<b>Description</b>	MPLS label value
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a>

	<i>number downstream-detailed-mapping id number mpls-label index number label (number   keyword)</i>
<b>Tree</b>	<i>label</i>
<b>Range</b>	16 to 1048575
<b>Options</b>	<ul style="list-style-type: none"> <li>• IPV4_EXPLICIT_NULL</li> <li>• IPV6_EXPLICIT_NULL</li> <li>• IMPLICIT_NULL</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol** *keyword*

<b>Description</b>	The label distribution protocol for the downstream label
<b>Context</b>	<i>oam lsp-trace te-policy sr-uncolored policy policy-name string protocol-origin keyword session-id id number hop hop-index number probe probe-index number downstream-detailed-mapping id number mpls-label index number protocol keyword</i>
<b>Tree</b>	<i>protocol</i>
<b>Default</b>	unknown
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• static</li> <li>• bgp</li> <li>• ldp</li> <li>• rsvp-te</li> <li>• ospf</li> <li>• isis</li> <li>• ospfv3</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mtu** *number*

<b>Description</b>	The size in octets of the largest MPLS frame (including label stack) that fits on this downstream interface
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<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">downstream-detailed-mapping id</a> <i>number</i> <a href="#">mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-probe-send-failure-reason** *keyword*

<b>Description</b>	Indicates the reason why the OAM manager could not send the request message
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">last-probe-send-failure-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">last-probe-send-failure-reason</a>
<b>Default</b>	no errors
<b>Options</b>	<ul style="list-style-type: none"> <li>• timeout</li> <li>• source-ip-not-local</li> <li>• invalid-prefix</li> <li>• sr-prefix-is-local</li> <li>• ldp-prefix-is-local</li> <li>• invalid-dest-ip</li> <li>• dest-address-type-mismatch</li> <li>• next-hop-ip-not-found</li> <li>• next-hop-if-name-not-found</li> <li>• packet-size-too-big</li> <li>• far-end-unreachable</li> <li>• prefix-unknown</li> <li>• ds-map-not-supported</li> <li>• unexpected-error</li> <li>• no errors</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">probe-size</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probes-sent** *number*

<b>Description</b>	The number of echo-request messages sent to the hop until a reply was received
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">probes-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">probes-sent</a>
<b>Range</b>	1 to 10
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply**

<b>Description</b>	Details about the reply message for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply</a>
<b>Tree</b>	<a href="#">reply</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-ttl** *number*

<b>Description</b>	The value of the MPLS TTL in the top label stack entry of the received echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply mpls-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received** *boolean*

<b>Description</b>	Reads true if the reply message was received
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply received</a> <i>boolean</i>
<b>Tree</b>	<a href="#">received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-sender** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address of the sender of the echo-reply message
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply reply-sender</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">reply-sender</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**return-code** *keyword*

<b>Description</b>	Return code value in the echo-reply
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<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply return-code</a> <i>keyword</i>
<b>Tree</b>	<a href="#">return-code</a>
<b>Default</b>	no-return-code
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-return-code</li> <li>• malformed-echo-request-received</li> <li>• one-or-more-tlvs-not-understood</li> <li>• replying-router-is-egress-for-fec-at-stack-depth-n</li> <li>• replying-router-has-no-mapping-for-fec-at-stack-depth-n</li> <li>• downstream-mapping-mismatch</li> <li>• upstream-interface-index-unknown</li> <li>• reserved</li> <li>• label-switched-at-stack-depth-n</li> <li>• label-switched-but-no-MPLS-at-stack-depth-n</li> <li>• fec-does-not-use-given-label-at-stack-depth-n</li> <li>• no-label-entry-at-stack-depth-n</li> <li>• protocol-unavailable-at-stack-depth-n</li> <li>• premature-termination</li> <li>• ddmapped-tlv-has-return-code-subcode-details</li> <li>• label-switched-with-fec-change</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **return-subcode** *number*

<b>Description</b>	Return subcode in the echo-reply
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply return-subcode</a> <i>number</i>
<b>Tree</b>	<a href="#">return-subcode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip-time** *number*

<b>Description</b>	The round trip-time between the request and reply for this sequence number or hop
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply round-trip-time</a> <i>number</i>
<b>Tree</b>	<a href="#">round-trip-time</a>
<b>Default</b>	0
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**udp-data-length** *number*

<b>Description</b>	The length of the UDP payload
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">hop hop-index</a> <i>number</i> <a href="#">probe probe-index</a> <i>number</i> <a href="#">reply udp-data-length</a> <i>number</i>
<b>Tree</b>	<a href="#">udp-data-length</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-destination**

<b>Description</b>	Enter the path-destination context
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">path-destination</a>
<b>Tree</b>	<a href="#">path-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the path destination
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">path-destination ip-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Egress IP next hop address used with path destination
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">path-destination next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface** *string*

<b>Description</b>	Egress router sub-interface used with the path destination
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">path-destination subinterface</a> <i>string</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-active** *boolean*

<b>Description</b>	Indicates if the test is still running (true) or not (false)
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">session-id id</a> <i>number</i> <a href="#">test-active</a> <i>boolean</i>

<b>Tree</b>	<a href="#">test-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## performance-monitoring

<b>Description</b>	OAM Performance Monitoring
<b>Context</b>	<a href="#">oam performance-monitoring</a>
<b>Tree</b>	<a href="#">performance-monitoring</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ethcfm

<b>Description</b>	Enter the ethcfm context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm</a>
<b>Tree</b>	<a href="#">ethcfm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delay

<b>Description</b>	Enter the delay context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bin-group [bin-group-name](#) *string*

<b>Description</b>	Enter the bin-group list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i>
<b>Tree</b>	<a href="#">bin-group</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-group-name** *string*

<b>Description</b>	<p>The name of the bin group</p> <p>Each performance monitoring session requires a bin-group references. The bin-group includes information on how the delay information is binned and any threshold or exclusion functions. Each performance monitoring session references the bin-group 'default'. The 'default' bin-group is created by the system. Its purpose is to reduce the configuration when the binning of information is not a key requirement for the performance monitoring session. It contains basic values. The bin-type parameters cannot be modified. The following bin-type and lower-bound values are assigned to the bin-group 'default'. These values are microseconds.</p> <pre>bin-type fd bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 } bin 2 { lower-bound 10000 } bin-type fdr bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 } bin-type ifdv bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 }</pre> <p>The bin-group 'default' can be entered in the configuration. It must include the admin-state 'enable'. If entered in the configuration it cannot be deleted if any performance monitoring session is referencing it. The information for the bin-group 'default' is available in state.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administrative state of the bin group
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-type** *bin-metric* *keyword*

**Description** Enter the bin-type list instance

**Context** [oam performance-monitoring ethcfm delay bin-group bin-group-name](#) *string bin-type bin-metric keyword*

**Tree** [bin-type](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-metric** *keyword*

**Description** Enter the bin-type list instance

**Context** [oam performance-monitoring ethcfm delay bin-group bin-group-name](#) *string bin-type bin-metric keyword*

**Options**

- fd
- fdr
- ifdv

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin** *bin-number* *number*

**Description** Enter the bin number list instance

**Context** [oam performance-monitoring ethcfm delay bin-group bin-group-name](#) *string bin-type bin-metric keyword bin bin-number number*

**Tree** [bin](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-number** *number*

**Description** The number of the bin

The bin values must be contiguous. Space cannot be left between numerical values. If no lower-bound is configured for a bin the default lower-bound will be 1000 microseconds multiplied by the bin number. If this value conflicts with a lower bin number lower-bound value the configuration of an appropriate lower-bound number for the bin must be configured in the same transaction as the addition of the bin to the bin-group.

<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword bin bin-number number</i>
<b>Range</b>	0 to 9
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lower-bound *number*

<b>Description</b>	Lower bound for the bin  The lower-bound value between two adjacent bins represents the range of results that will be mapped to the bin. The lower-bound value for the bin represents the smallest value in the range. The lower-bound value of the adjacent higher bin represents the smallest value in its range.  Bin 0 must have a lower-bound value of '0'. Bin numbers must not have conflicting lower-bound values. Higher bin numbers must not have lower-bound values less than any lower bin number.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword bin bin-number number lower-bound number</i>
<b>Tree</b>	<a href="#">lower-bound</a>
<b>Range</b>	0   1 to 4294967295
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-event [direction](#) *keyword*

<b>Description</b>	Enter the delay-event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword delay-event direction keyword</i>
<b>Tree</b>	<a href="#">delay-event</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

**Description** The direction of the measurement of interest  
A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.

**Context** [oam performance-monitoring ethcfm delay bin-group bin-group-name](#) *string bin-type bin-metric keyword delay-event direction keyword*

**Options**

- forward
- backward
- round-trip

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

**Description** The not be exceeded value used to clear a previously triggered threshold crossing alarm  
Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.  
A value '0' means a subsequent measurement interval must have no results in the bins counted against the threshold.

**Context** [oam performance-monitoring ethcfm delay bin-group bin-group-name](#) *string bin-type bin-metric keyword delay-event direction keyword clear-threshold number*

**Tree** [clear-threshold](#)

**Range** 0 to 863999

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**exclude-lowest-bin** *number*

<b>Description</b>	Lowest bin excluded from the threshold crossing alarm count  This bin must be higher than the ../lowest-bin, which is used to specify which bins to consider for threshold crossing alarms. If the configured bin number does not exist then this leaf have no effect.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">delay-event direction</a> <i>keyword</i> <a href="#">exclude-lowest-bin</a> <i>number</i>
<b>Tree</b>	<a href="#">exclude-lowest-bin</a>
<b>Range</b>	1 to 9
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lowest-bin** *number*

<b>Description</b>	The lowest bin number to include when comparing counts to thresholds  The number of results in this bin and all higher bins are compared to the configured thresholds. If the configured bin number does not exist then no threshold will be trigger.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">delay-event direction</a> <i>keyword</i> <a href="#">lowest-bin</a> <i>number</i>
<b>Tree</b>	<a href="#">lowest-bin</a>
<b>Range</b>	0 to 9
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold count for excessive delay  A threshold crossing alarm is raised when the raise-threshold value is reached. The raise threshold is compared to the number of results the ../lowest-bin and all higher, excluding any results that would be excluded by the ../exclude-lowest-bin.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">delay-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>

<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **exclude-from-avg** [direction](#) *keyword*

<b>Description</b>	Enter the exclude-from-avg list instance used to exclude specified bins from their values being included in the average
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword exclude-from-avg direction keyword</i>
<b>Tree</b>	<a href="#">exclude-from-avg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

<b>Description</b>	The direction of the measurement  A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword exclude-from-avg direction keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• round-trip</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bins** *string*

<b>Description</b>	Bin numbers excluded from the average calculation  Results mapped to these bins do not impact the delay metric average values.
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric keyword exclude-from-avg direction keyword bins</a> <i>string</i>
<b>Tree</b>	<a href="#">bins</a>
<b>String Length</b>	1 to 39
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	A description of the bin group
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reference-count** *number*

<b>Description</b>	The number of OAM-PM test sessions referencing the bin-group
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i> <a href="#">reference-count</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loss**

<b>Description</b>	Enter the loss context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss</a>
<b>Tree</b>	<a href="#">loss</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-events-template** [loss-events-template-name](#) *string*

<b>Description</b>	The delay-template list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i>
<b>Tree</b>	<a href="#">loss-events-template</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	255

**loss-events-template-name** *string*

<b>Description</b>	A description of the template
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**avg-flr-event** [direction](#) *keyword*

<b>Description</b>	Enter the avg-flr-event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event</a> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">avg-flr-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event</a> <a href="#">direction</a> <i>keyword</i>

<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *decimal-number*

<b>Description</b>	<p>The value used to clear a previously triggered Frame Loss Ratio alarm</p> <p>Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0.000 to 99.999
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### raise-threshold *decimal-number*

<b>Description</b>	<p>Raise threshold for the average Frame Loss Ratio</p> <p>This event is computed and considered at the completion of the measurement interval.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	0.001 to 100.000
<b>Units</b>	percent
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### chli-event *direction* keyword

**Description** Enter the Consecutive High Loss Interval list instance

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [chli-event direction](#) *keyword*

**Tree** [chli-event](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### direction *keyword*

**Description** The direction of the measurement of interest  
A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [chli-event direction](#) *keyword*

**Options**

- forward
- backward
- aggregate

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *number*

**Description** The value used to clear a previously triggered alarm for the metric of interest  
Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [chli-event direction](#) *keyword* [clear-threshold](#) *number*

<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">chli-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	A description of the loss template
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hli-event** [direction](#) *keyword*

<b>Description</b>	Enter the High Loss Interval list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event</a> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">hli-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear-threshold** *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>



<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reference-count *number*

<b>Description</b>	The number of OAM-PM test sessions referencing the loss template
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">reference-count</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unavailability-event [direction](#) *keyword*

<b>Description</b>	Enter the unavailability-event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event</a> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">unavailability-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### direction *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event</a> <a href="#">direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *number*

**Description** The value used to clear a previously triggered alarm for the metric of interest  
Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [unavailability-event direction](#) *keyword* [clear-threshold number](#)

**Tree** [clear-threshold](#)

**Range** 0 to 863999

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### raise-threshold *number*

**Description** Raise threshold for the metric of interest  
This event is computed and considered during the measurement interval.

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [unavailability-event direction](#) *keyword* [raise-threshold number](#)

**Tree** [raise-threshold](#)

**Range** 1 to 864000

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undetermined-availability-event [direction](#) *keyword*

**Description** Enter the undetermined availability event list instance

**Context** [oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name](#) *string* [undetermined-availability-event direction](#) *keyword*

<b>Tree</b>	<a href="#">undetermined-availability-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-availability-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-availability-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-availability-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-unavailability-event** [direction](#) *keyword*

<b>Description</b>	Enter the undetermined unavailability event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">undetermined-unavailability-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear-threshold** *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest  Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest  This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session** [session-name](#) *string*

<b>Description</b>	Enter the session list instance which contains the test session configuration
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-name** *string*

**Description** The name of the OAM-PM session

**Context** [oam performance-monitoring ethcfm session session-name](#) *string*

**String Length** 1 to 32

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

**Description** A description of the OAM-PM session

**Context** [oam performance-monitoring ethcfm session session-name](#) *string*  
[description](#) *string*

**Tree** [description](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **eth-cfm-single-ended-dmm-test**

**Description** Enter the eth-cfm-single-ended-dmm-test context

**Context** [oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test](#)

**Tree** [eth-cfm-single-ended-dmm-test](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

**Description** Administrative state of the single ended test

**Context** [oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test admin-state](#) *keyword*

<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-group** *reference*

<b>Description</b>	Reference the bin group to be used for this session If not specified the 'default' bin-group will be used
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test bin-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">bin-group</a>
<b>Default</b>	default
<b>Reference</b>	<a href="#">oam performance-monitoring ethcfm delay bin-group bin-group-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-group-binning** *keyword*

<b>Description</b>	The current binning of delay metric values A value 'active' means the bin-group being referenced by the test session has an admin-state 'enable'. A value 'inactive' means the bin-group being referenced by the test session has an admin-state 'disable'. When the value is 'inactive' test packets are being transmitted but there is no bin-group to bin the result and the delay results are discarded.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test bin-group-binning</a> <i>keyword</i>
<b>Tree</b>	<a href="#">bin-group-binning</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**data-tlv-size** *number*

<b>Description</b>	The Data TLV byte count used to increase the size of the base CFM PDU A value '0' means no Data TLV is added. Any other value represents the size of the Data TLV.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test data-tlv-size</a> <i>number</i>
<b>Tree</b>	<a href="#">data-tlv-size</a>
<b>Range</b>	0   3 to 9502
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-events** [bin-metric](#) *keyword* [direction](#) *keyword*

<b>Description</b>	A list of delay events for the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test delay-events bin-metric</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">delay-events</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-metric** *keyword*

<b>Description</b>	Delay metric
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test delay-events bin-metric</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• fd</li> <li>• fdr</li> <li>• ifdv</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**direction** *keyword*

<b>Description</b>	The direction of the measurement  A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test delay-events bin-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• round-trip</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-tca-time** *string*

<b>Description</b>	UTC date and time at the start of the measurement interval which generated most recent raise or clear
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test delay-events bin-metric keyword direction keyword last-tca-time string</a>
<b>Tree</b>	<a href="#">last-tca-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the Threshold Crossing Alerts (TCAs)  The conditions are evaluated in the order shown.  The value 'pending' is returned if the threshold configuration for the specified indices changed during the current measurement interval. The threshold configuration is evaluated in the next full measurement interval after the new configuration.  The value 'active' is returned if the specified indices have a no clear threshold configured (stateless), and the current measurement interval has generated a Raise TCA. The value is also returned if the specified
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indices have a clear threshold configured (stateful), and the most recent TCA generated was a Raise.

The value 'not-active' is returned for all other conditions (e.g., thresholding is not configured for the specified indices).

<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test delay-events bin-metric</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• active</li> <li>• not-active</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detected-tx-error** *keyword*

<b>Description</b>	<p>Reason for the specified test session's current inability (if any) to launch request frames</p> <p>For example, 'eth-parent-admin-down(4)' could be returned for a test if the MEP to be tested is associated with a subinterface which is administratively down.</p> <p>Not all request frame transmit failures are detected by this mechanism. It is possible that the value 'none' will be returned when the test is unable to transmit frames during undetectable transmission errors.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test detected-tx-error</a> <i>keyword</i>
<b>Tree</b>	<a href="#">detected-tx-error</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• port-down</li> <li>• no-tx-port</li> <li>• eth-parent-admin-down</li> <li>• eth-no-mep-or-admin-down</li> <li>• unexpected-error</li> <li>• network-instance-admin-down</li> <li>• network-instance-oper-down</li> <li>• no-subinterface</li> <li>• no-direct-subinterface</li> <li>• source-subinterface-down</li> </ul>

- source-ip-not-local
- next-hop-ip-is-local
- dest-mac-resolve-fail

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interval** *keyword***Description**

The transmission rate of the CFM packets

**Context**[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test interval](#) *keyword***Tree**[interval](#)**Default**

1s

**Options**

- 50ms
- 100ms
- 200ms
- 300ms
- 400ms
- 500ms
- 600ms
- 700ms
- 800ms
- 900ms
- 1s
- 10s

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measurement-result** *mi-ro-type* *keyword***Description**

The test statistics for a delay measurement

**Context**[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test measurement-result mi-ro-type](#) *keyword***Tree**[measurement-result](#)**Configurable**

False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mi-ro-type** *keyword*

**Description** The duration of the measurement interval

**Context** [oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test measurement-result mi-ro-type](#) *keyword*

**Options**

- 1-minute
- 5-minutes
- 15-minutes
- 1-hour
- 1-day
- raw

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *index number*

**Description** Enter the index list instance

**Context** [oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test measurement-result mi-ro-type](#) *keyword* [index](#) *index number*

**Tree** [index](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *number*

**Description** Measurement interval unique identifier

**Context** [oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test measurement-result mi-ro-type](#) *keyword* [index](#) *index number*

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**elapsed-time** *number*

<b>Description</b>	Time elapsed since data collection started for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number elapsed-time</a> <i>number</i>
<b>Tree</b>	<a href="#">elapsed-time</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-progress</li> <li>• completed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	The time that the current measurement interval started
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bin-type [bin-metric keyword](#)

<b>Description</b>	Enter the bin-type list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword</a>
<b>Tree</b>	<a href="#">bin-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bin-metric [keyword](#)

<b>Description</b>	The identifier of a bin type within a bin group
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• fd</li> <li>• fdr</li> <li>• ifdv</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## backward

<b>Description</b>	Enter the backward context
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward</a>
<b>Tree</b>	<a href="#">backward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number**

<b>Description</b>	Average delay metric in the backward direction, from reflector to source This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay metric in the backward direction, from reflector to source This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay metric in the backward direction, from reflector to source
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This is for the specific direction, test session, interval duration, interval number, and bin type.

<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics bin-type bin-metric</a> <i>keyword</i> <a href="#">backward</a> <a href="#">minimum</a> <i>number</i>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin** [bin-number](#) *number*

<b>Description</b>	Enter the bin list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i>
<b>Tree</b>	<a href="#">bin</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-number** *number*

<b>Description</b>	The number of the bin
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i>
<b>Range</b>	0 to 9
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **backward-measurements** *number*

<b>Description</b>	Number of backward direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i> <a href="#">backward-measurements</a> <i>number</i>



<b>Tree</b>	<a href="#">backward-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forward-measurements *number*

<b>Description</b>	Number of forward direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number forward-measurements number</a>
<b>Tree</b>	<a href="#">forward-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### round-trip-measurements *number*

<b>Description</b>	Number of round trip direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number round-trip-measurements number</a>
<b>Tree</b>	<a href="#">round-trip-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forward

<b>Description</b>	Enter the forward context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward</a>
<b>Tree</b>	<a href="#">forward</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number**

<b>Description</b>	Average delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## round-trip

<b>Description</b>	Enter the round-trip context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip</a>
<b>Tree</b>	<a href="#">round-trip</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## average number

<b>Description</b>	Average delay metric round trip, source computed based on four timestamps This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## maximum number

<b>Description</b>	Maximum delay metric round trip, source computed based on four timestamps
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This is for the specific direction, test session, interval duration, interval number, and bin type.

<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minimum *number*

<b>Description</b>	Minimum delay metric round trip, source computed based on four timestamps  This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-received *number*

<b>Description</b>	Number of test frames received for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-dmm-test measurement-result mi-ro-type keyword index index number statistics frames-received number</a>
<b>Tree</b>	<a href="#">frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frames-transmitted** *number*

<b>Description</b>	Number of test frames sent for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics frames-transmitted</a> <i>number</i>
<b>Tree</b>	<a href="#">frames-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**suspect-status** *boolean*

<b>Description</b>	<p>Whether the Measurement Interval has been marked as suspect</p> <p>The object is to be set to 'false' at the start of a measurement interval. It is set to 'true' when there is a discontinuity in the performance measurements during the Measurement Interval. This flag is used to warn operators if the result count in the measurement interval is suboptimal for considering the results valid. Results are still collected, computed, and stored regardless of this flag. This is meant as a post processing notification to an external system.</p> <p>Conditions for a discontinuity include, but are not limited to the following:</p> <ol style="list-style-type: none"> <li>1 - The local time-of-day clock is adjusted by at least 10 seconds</li> <li>2 - The test is halted before the current Measurement Interval is completed</li> <li>3 - A local test failure, or reconfiguration that disrupts testing</li> </ol>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number suspect-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suspect-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**newest-index** *number*

<b>Description</b>	The number of the newest measurement interval index for the specified session and test type
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">newest-index</a> <i>number</i>

<b>Tree</b>	<a href="#">newest-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Enter the oper-state context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting</li> </ul>

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-duration** *number***Description**

Duration of an OAM-PM session with a session-type on-demand

When this leaf is not specified the on-demand test will execute until manually stopped.

**Context**

[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test test-duration](#) *number*

**Tree**[test-duration](#)**Range**

1 to 86400

**Units**

seconds

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-id** (*number* | *keyword*)**Description**

Test ID of the test session

Test IDs are protocol specific. The same value may be re-used for different protocols but not for the same protocol. When the value 'auto' is configured the test-id is dynamically assigned from the upper 32-bit range, [2147483648..2247483647]

**Context**

[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-dmm-test test-id](#) (*number* | *keyword*)

**Tree**[test-id](#)**Range**

0 to 2147483647

**Default**

auto

<b>Options</b>	• auto
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-id-in-use** *number*

<b>Description</b>	Test ID allocated to the test session
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-dmm-test test-id-in-use</a> <i>number</i>
<b>Tree</b>	<a href="#">test-id-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**eth-cfm-single-ended-slm-test**

<b>Description</b>	Enter the eth-cfm-single-ended-slm-test context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test</a>
<b>Tree</b>	<a href="#">eth-cfm-single-ended-slm-test</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state of the single ended test
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	• enable • disable
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**data-tlv-size** *number*

<b>Description</b>	The Data TLV byte count used to increase the size of the base CFM PDU A value '0' means no Data TLV is added. Any other value represents the size of the Data TLV.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test data-tlv-size</a> <i>number</i>
<b>Tree</b>	<a href="#">data-tlv-size</a>
<b>Range</b>	0   3 to 9502
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detected-tx-error** *keyword*

<b>Description</b>	Reason for the specified test session's current inability (if any) to launch request frames  For example, 'eth-parent-admin-down(4)' could be returned for a test if the MEP to be tested is associated with a subinterface which is administratively down.  Not all request frame transmit failures are detected by this mechanism. It is possible that the value 'none' will be returned when the test is unable to transmit frames during undetectable transmission errors.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test detected-tx-error</a> <i>keyword</i>
<b>Tree</b>	<a href="#">detected-tx-error</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• port-down</li> <li>• no-tx-port</li> <li>• eth-parent-admin-down</li> <li>• eth-no-mep-or-admin-down</li> <li>• unexpected-error</li> <li>• network-instance-admin-down</li> <li>• network-instance-oper-down</li> <li>• no-subinterface</li> <li>• no-direct-subinterface</li> <li>• source-subinterface-down</li> </ul>

- source-ip-not-local
- next-hop-ip-is-local
- dest-mac-resolve-fail

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flr-threshold** *number***Description**

Frame Loss Ratio (FLR) is a percentage applied to the frame loss within a delta-t

If the FLR is not reached the delta-t is not considered a High Loss Interval. If the FLR is reach the delta-t is considered a High Loss Interval.

**Context**

[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-slm-test flr-threshold](#) *number*

**Tree**[flr-threshold](#)**Range**

0 to 100

**Default**

50

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hli-force-count** *boolean***Description**

Increment High Loss Interval and Consecutive High Loss Interval counters regardless of unavailability

A value 'false' will not increment the HLI/CHLI counters during times of unavailability. A value 'true' will increment the HLI/CHLI counters during times of unavailability.

**Context**

[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-slm-test hli-force-count](#) *boolean*

**Tree**[hli-force-count](#)**Default**

false

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interval** *keyword*

<b>Description</b>	The transmission rate of the CFM packets
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test interval</a> <i>keyword</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Default</b>	1s
<b>Options</b>	<ul style="list-style-type: none"> <li>• 50ms</li> <li>• 100ms</li> <li>• 200ms</li> <li>• 300ms</li> <li>• 400ms</li> <li>• 500ms</li> <li>• 600ms</li> <li>• 700ms</li> <li>• 800ms</li> <li>• 900ms</li> <li>• 1s</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-event** *reference*

<b>Description</b>	The loss event template associated with this loss test session and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test loss-event</a> <i>reference</i>
<b>Tree</b>	<a href="#">loss-event</a>
<b>Reference</b>	<a href="#">oam performance-monitoring ethcfm loss loss-events-template loss-events-template-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-events** *loss-metric keyword direction keyword*

<b>Description</b>	Enter the loss events list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test loss-events loss-metric keyword direction keyword</a>
<b>Tree</b>	<a href="#">loss-events</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-metric** *keyword*

<b>Description</b>	Loss metric
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test loss-events loss-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• average-flr</li> <li>• chli</li> <li>• hli</li> <li>• unavailability</li> <li>• undetermined-availability</li> <li>• undetermined-unavailability</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	<p>The direction of the measurement of interest</p> <p>A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test loss-events loss-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-tca-time** *string*

**Description** UTC date and time at the start of the measurement interval which generated most recent raise or clear

**Context** [oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test loss-events loss-metric keyword direction keyword last-tca-time string](#)

**Tree** [last-tca-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

**Description** Operational state of the Threshold Crossing Alerts (TCAs) for the specified session

The conditions are evaluated in the order shown.

The value 'pending' is returned if the threshold configuration for the specified indices changed during the current measurement interval.

The value 'active' is returned if the specified indices have a default clear threshold configured, and the current measurement interval has generated a Raise TCA. The value is also returned if the specified indices have a non-default clear threshold configured, and the most recent TCA generated was a Raise.

The value 'not-active' is returned for all other conditions (e.g. thresholding is not configured for the specified indices).

**Context** [oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test loss-events loss-metric keyword direction keyword oper-state keyword](#)

**Tree** [oper-state](#)

**Options**

- pending
- active
- not-active

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measurement-result** *mi-ro-type keyword*

<b>Description</b>	The test statistics for a delay measurement.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword</a>
<b>Tree</b>	<a href="#">measurement-result</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mi-ro-type** *keyword*

<b>Description</b>	The duration of the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1-minute</li> <li>• 5-minutes</li> <li>• 15-minutes</li> <li>• 1-hour</li> <li>• 1-day</li> <li>• raw</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *index number*

<b>Description</b>	Enter the index list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Measurement interval unique identifier
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**elapsed-time number**

<b>Description</b>	Time elapsed since data collection started for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number elapsed-time number</a>
<b>Tree</b>	<a href="#">elapsed-time</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	Operational state of the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in-progress</li> <li>• completed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	The time that the current measurement interval started
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backward**

<b>Description</b>	Enter the backward context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <a href="#">statistics</a> <a href="#">backward</a>
<b>Tree</b>	<a href="#">backward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available** *number*

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward available number</a>
<b>Tree</b>	<a href="#">available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **average-frame-loss-ratio** *number*

<b>Description</b>	Average Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward average-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">average-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **consecutive-high-loss-intervals** *number*

<b>Description</b>	Number of Consecutive High Loss Intervals (CHLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward consecutive-high-loss-intervals number</a>
<b>Tree</b>	<a href="#">consecutive-high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **high-loss-intervals** *number*

<b>Description</b>	Number of High Loss Intervals (HLIs) for the specified direction and measurement interval
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics backward high-loss-intervals</i> <i>number</i>
<b>Tree</b>	<a href="#">high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-loss** *number*

<b>Description</b>	Loss in the backward direction  The difference between the received packets on the session-sender and the packets sent from the session-reflector.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics backward in-loss</i> <i>number</i>
<b>Tree</b>	<a href="#">in-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-frame-loss-ratio** *number*

<b>Description</b>	Maximum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics backward maximum-frame-loss-ratio</i> <i>number</i>
<b>Tree</b>	<a href="#">maximum-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-frame-loss-ratio** *number*

<b>Description</b>	Minimum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward minimum-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">minimum-frame-loss-ratio</a>
<b>Units</b>	millipercen
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unavailable** *number*

<b>Description</b>	Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward unavailable number</a>
<b>Tree</b>	<a href="#">unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-available** *number*

<b>Description</b>	<p>Number of availability indicators evaluated as Available for the specified direction and measurement interval, based on extrapolation</p> <p>Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should be used to adjust the availability counter if the reason was packet loss and not an administrative function that caused the condition.</p>
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward undetermined-available number</a>
<b>Tree</b>	<a href="#">undetermined-available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undetermined-unavailable number

<b>Description</b>	<p>Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval, based on extrapolation</p> <p>Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should not be used to adjust the unavailability counter if the reason was packet loss and not an administrative function that caused the condition.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics backward undetermined-unavailable number</a>
<b>Tree</b>	<a href="#">undetermined-unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forward

<b>Description</b>	Enter the forward context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics forward</a>
<b>Tree</b>	<a href="#">forward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available** *number*

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward available</i> <i>number</i>
<b>Tree</b>	<a href="#">available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average-frame-loss-ratio** *number*

<b>Description</b>	Average Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward average-frame-loss-ratio</i> <i>number</i>
<b>Tree</b>	<a href="#">average-frame-loss-ratio</a>
<b>Units</b>	millipercen
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**consecutive-high-loss-intervals** *number*

<b>Description</b>	Number of Consecutive High Loss Intervals (CHLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward consecutive-high-loss-intervals</i> <i>number</i>
<b>Tree</b>	<a href="#">consecutive-high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**high-loss-intervals** *number*

<b>Description</b>	Number of High Loss Intervals (HLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward high-loss-intervals</i> <i>number</i>
<b>Tree</b>	<a href="#">high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-frame-loss-ratio** *number*

<b>Description</b>	Maximum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward maximum-frame-loss-ratio</i> <i>number</i>
<b>Tree</b>	<a href="#">maximum-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-frame-loss-ratio** *number*

<b>Description</b>	Minimum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index index number</a> <i>statistics forward minimum-frame-loss-ratio</i> <i>number</i>
<b>Tree</b>	<a href="#">minimum-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-loss number**

<b>Description</b>	Loss in the forward direction The difference between the received packets on the session-reflector and the packets sent from the session-sender.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics forward out-loss number</a>
<b>Tree</b>	<a href="#">out-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unavailable number**

<b>Description</b>	Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics forward unavailable number</a>
<b>Tree</b>	<a href="#">unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-available number**

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval, based on extrapolation  Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should be used to adjust the availability counter if the reason was packet loss and not an administrative function that caused the condition.
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics forward undetermined-available number</a>
<b>Tree</b>	<a href="#">undetermined-available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undetermined-unavailable *number*

<b>Description</b>	Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval, based on extrapolation  Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should not be used to adjust the unavailability counter if the reason was packet loss and not an administrative function that caused the condition.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics forward undetermined-unavailable number</a>
<b>Tree</b>	<a href="#">undetermined-unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-received *number*

<b>Description</b>	Number of test session frames received for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics frames-received number</a>
<b>Tree</b>	<a href="#">frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-transmitted *number*

**Description** Number of test session frames transmitted for the specified direction and measurement interval

**Context** [oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number statistics frames-transmitted number](#)

**Tree** [frames-transmitted](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### suspect-status *boolean*

**Description** Whether the Measurement Interval has been marked as suspect

The object is to be set to 'false' at the start of a measurement interval. It is set to 'true' when there is a discontinuity in the performance measurements during the Measurement Interval. This flag is used to warn operators if the result count in the measurement interval is suboptimal for considering the results valid. Results are still collected, computed, and stored regardless of this flag. This is meant as a post processing notification to an external system.

Conditions for a discontinuity include, but are not limited to the following:

- 1 - The local time-of-day clock is adjusted by at least 10 seconds
- 2 - The test is halted before the current Measurement Interval is completed
- 3 - A local test failure, or reconfiguration that disrupts testing

**Context** [oam performance-monitoring ethcfm session session-name string eth-cfm-single-ended-slm-test measurement-result mi-ro-type keyword index index number suspect-status boolean](#)

**Tree** [suspect-status](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**newest-index** *number*

<b>Description</b>	The number of the newest measurement interval index for the specified session and test type
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">newest-index</a> <i>number</i>
<b>Tree</b>	<a href="#">newest-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Enter the oper-state context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power</li> </ul>

- Component is offline due to insufficient system power
- degraded
  - Component or process is in a degraded state
- warm-reboot
  - Component or process is currently warm rebooting
  - This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
  - Component or process is currently waiting
  - This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-duration** *number***Description**

Duration of an OAM-PM session with a session-type on-demand

When this leaf is not specified the on-demand test will execute until manually stopped.

**Context**

[oam performance-monitoring ethcfm session session-name](#) *string* [eth-cfm-single-ended-slm-test test-duration](#) *number*

**Tree**[test-duration](#)**Range**

1 to 86400

**Units**

seconds

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-id** (*number* | *keyword*)**Description**

Test ID of the test session

Test IDs are protocol specific. The same value may be re-used for different protocols but not for the same protocol. When the value 'auto' is configured the test-id is dynamically assigned from the upper 32-bit range, [2147483648..2247483647]

<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string eth-cfm-single-ended-slm-test test-id</i> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">test-id</a>
<b>Range</b>	0 to 2147483647
<b>Default</b>	auto
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-id-in-use** *number*

<b>Description</b>	Test ID allocated to the test session
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string eth-cfm-single-ended-slm-test test-id-in-use</i> <i>number</i>
<b>Tree</b>	<a href="#">test-id-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **timing**

<b>Description</b>	Enter the timing context used to configure availability options
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string eth-cfm-single-ended-slm-test timing</i>
<b>Tree</b>	<a href="#">timing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **chli-threshold** *number*

<b>Description</b>	<p>Consecutive High Loss Interval (CHLI) threshold</p> <p>The threshold of consecutive delta-ts within a sliding availability window that will cause this counter to increment. The CHLI counter will increment a maximum of one time for any given availability window. The values provide information on the number of consecutive HLIs that occurred in an availability window without meeting the unavailability criteria.</p>
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test timing chli-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">chli-threshold</a>
<b>Range</b>	1 to 9
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **consecutive-delta-t** *number*

<b>Description</b>	Number of consecutive delta-t that comprise the availability/unavailability sliding window, must not exceed 100 seconds  Availability and unavailability state changes will occur when the sliding window is completely comprised of a different state values than the current state
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test timing consecutive-delta-t</a> <i>number</i>
<b>Tree</b>	<a href="#">consecutive-delta-t</a>
<b>Range</b>	2 to 10
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **frames-per-delta-t** *number*

<b>Description</b>	Number of frames that comprise one delta-t used for comparison to FLR configuration  The length of the delta-t window is frames-per-delta-t * the probe interval.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">eth-cfm-single-ended-slm-test timing frames-per-delta-t</a> <i>number</i>
<b>Tree</b>	<a href="#">frames-per-delta-t</a>
<b>Range</b>	1 to 50
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measurement-interval** *mi-duration* keyword

<b>Description</b>	The list of measurement intervals associated with the OAM-PM session
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i>
<b>Tree</b>	<a href="#">measurement-interval</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**mi-duration** *keyword*

<b>Description</b>	Configure the measurement interval duration  The measurement interval duration defines the length of the sample window over which the statistics are collected, computed, and stored. The system automatically instantiates a 'raw' measurement interval for each defined test session. The 'raw' measurement interval is unbounded and continually accumulates measurements while the test session admin-state has value 'enable'. The 'raw' measurement interval can have result cleared to flush restart the accumulation of statistics.
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1-minute</li> <li>• 5-minutes</li> <li>• 15-minutes</li> <li>• 1-hour</li> <li>• 1-day</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**boundary-type** *keyword*

<b>Description</b>	Aligning the start of the measurement interval  A value 'clock-aligned' aligns the start and end of the sample window with the time-of-day clock. A value 'test-aligned' aligns the sample window with the start of the test session.
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">boundary-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">boundary-type</a>
<b>Default</b>	clock-aligned
<b>Options</b>	<ul style="list-style-type: none"> <li>• clock-aligned</li> <li>• test-relative</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-offset *number*

<b>Description</b>	Aligning the measurement interval using an offset for the start, considering the boundary-type  The clock-offset must be '0' when the boundary-type value is not 'clock-aligned'. When the boundary-type is 'clock-aligned' the value of the clock-offset must be less than the duration of the measurement-interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">clock-offset</a> <i>number</i>
<b>Tree</b>	<a href="#">clock-offset</a>
<b>Range</b>	0 to 86399
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### intervals-stored *number*

<b>Description</b>	The number of completed measurement intervals stored in volatile memory before overwriting oldest  The more intervals stored the more memory will be consumed. The values vary per measurement interval duration.  1-minute default 32 maximum 96 5-minutes default 32 maximum 96 15-minutes default 32 maximum 96 1-hour default 24 maximum 24 1-day default 1 maximum 1  The total of 1-minute, plus 5-minutes, plus 15-minutes cannot exceed 96. That is a shared pool between those measurement intervals.
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<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">intervals-stored</a> <i>number</i>
<b>Tree</b>	<a href="#">intervals-stored</a>
<b>Range</b>	1 to 96
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## threshold-alerts

<b>Description</b>	Enabling configured events for the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts</a>
<b>Tree</b>	<a href="#">threshold-alerts</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delay-event *keyword*

<b>Description</b>	Enable the delay events associated with the bin group assigned to this test session for this measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts</a> <a href="#">delay-event</a> <i>keyword</i>
<b>Tree</b>	<a href="#">delay-event</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## loss-event *keyword*

<b>Description</b>	Enable the loss events associated with the loss test session for this measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts</a> <a href="#">loss-event</a> <i>keyword</i>



<b>Tree</b>	<a href="#">loss-event</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **priority number**

<b>Description</b>	The priority used when generating CFM test frames
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">priority number</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-type keyword**

<b>Description</b>	<p>Session scheduling type for the test sessions configured under this OAM-PM session</p> <p>A value 'proactive' means the protocol specific test session will be always on when admin-state is 'enable'. A value 'on-demand' requires the tools start command to be issued for test session with admin-state 'enable'</p>
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name</a> <i>string</i> <a href="#">session-type keyword</a>
<b>Tree</b>	<a href="#">session-type</a>
<b>Default</b>	proactive
<b>Options</b>	<ul style="list-style-type: none"> <li>• proactive</li> <li>• on-demand</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source**

<b>Description</b>	Enter the source context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string source</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id reference**

<b>Description</b>	The maintenance association identifier specific to the domain identifier
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string source association-id reference</a>
<b>Tree</b>	<a href="#">association-id</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**domain-id reference**

<b>Description</b>	The maintenance domain identifier
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string source domain-id reference</a>
<b>Tree</b>	<a href="#">domain-id</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id reference**

<b>Description</b>	The MEP identifier specific to the domain and association identifier
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string source mep-id reference</a>
<b>Tree</b>	<a href="#">mep-id</a>

<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **target** (*unicast-mac-address | number*)

<b>Description</b>	Target MAC address or remote MEP ID for the test
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string target (unicast-mac-address   number)</a>
<b>Tree</b>	<a href="#">target</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ip**

<b>Description</b>	Enable the ip context
<b>Context</b>	<a href="#">oam performance-monitoring ip</a>
<b>Tree</b>	<a href="#">ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delay**

<b>Description</b>	Enter the delay context
<b>Context</b>	<a href="#">oam performance-monitoring ip delay</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-group** [bin-group-name string](#)

<b>Description</b>	Enter the bin-group list instance
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<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i>
<b>Tree</b>	<a href="#">bin-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-group-name** *string*

<b>Description</b>	<p>The name of the bin group</p> <p>Each performance monitoring session requires a bin-group references. The bin-group includes information on how the delay information is binned and any threshold or exclusion functions. Each performance monitoring session references the bin-group 'default'. The 'default' bin-group is created by the system. Its purpose is to reduce the configuration when the binning of information is not a key requirement for the performance monitoring session. It contains basic values. The bin-type parameters cannot be modified. The following bin-type and lower-bound values are assigned to the bin-group 'default'. These values are microseconds.</p> <pre>bin-type fd bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 } bin 2 { lower-bound 10000 } bin-type fdr bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 } bin-type ifdv bin 0 { lower-bound 0 } bin 1 { lower-bound 5000 }</pre> <p>The bin-group 'default' can be entered in the configuration. It must include the admin-state 'enable'. If entered in the configuration it cannot be deleted if any performance monitoring session is referencing it. The information for the bin-group 'default' is available in state.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Administrative state of the bin group
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-type** [bin-metric](#) *keyword*

<b>Description</b>	Enter the bin-type list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i>
<b>Tree</b>	<a href="#">bin-type</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin-metric** *keyword*

<b>Description</b>	Enter the bin-type list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• fd</li> <li>• fdr</li> <li>• ifdv</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bin** [bin-number](#) *number*

<b>Description</b>	Enter the bin number list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i>
<b>Tree</b>	<a href="#">bin</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-number** *number*

<b>Description</b>	The number of the bin  The bin values must be contiguous. Space cannot be left between numerical values. If no lower-bound is configured for a bin the default lower-bound will be 1000 microseconds multiplied by the bin number. If this value conflicts with a lower bin number lower-bound value the configuration of an appropriate lower-bound number for the bin must be configured in the same transaction as the addition of the bin to the bin-group.
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i>
<b>Range</b>	0 to 9
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lower-bound** *number*

<b>Description</b>	Lower bound for the bin  The lower-bound value between two adjacent bins represents the range of results that will be mapped to the bin. The lower-bound value for the bin represents the smallest value in the range. The lower-bound value of the adjacent higher bin represents the smallest value in its range.  Bin 0 must have a lower-bound value of '0'. Bin numbers must not have conflicting lower-bound values. Higher bin numbers must not have lower-bound values less than any lower bin number.
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">bin bin-number</a> <i>number</i> <a href="#">lower-bound</a> <i>number</i>
<b>Tree</b>	<a href="#">lower-bound</a>
<b>Range</b>	0   1 to 4294967295
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-event** [direction](#) *keyword*

<b>Description</b>	Enter the delay-event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">delay-event direction</a> <i>keyword</i>

<b>Tree</b>	<a href="#">delay-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword delay-event direction keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• round-trip</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

<b>Description</b>	The not be exceeded value used to clear a previously triggered threshold crossing alarm  Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.  A value '0' means a subsequent measurement interval must have no results in the bins counted against the threshold.
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string bin-type bin-metric keyword delay-event direction keyword clear-threshold number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **exclude-lowest-bin** *number*

**Description** Lowest bin excluded from the threshold crossing alarm count  
This bin must be higher than the `../lowest-bin`, which is used to specify which bins to consider for threshold crossing alarms. If the configured bin number does not exist then this leaf have no effect.

**Context** [oam performance-monitoring ip delay bin-group bin-group-name](#) *string* [bin-type bin-metric](#) *keyword* [delay-event direction](#) *keyword* `exclude-lowest-bin number`

**Tree** [exclude-lowest-bin](#)

**Range** 1 to 9

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lowest-bin** *number*

**Description** The lowest bin number to include when comparing counts to thresholds  
The number of results in this bin and all higher bins are compared to the configured thresholds. If the configured bin number does not exist then no threshold will be trigger.

**Context** [oam performance-monitoring ip delay bin-group bin-group-name](#) *string* [bin-type bin-metric](#) *keyword* [delay-event direction](#) *keyword* `lowest-bin number`

**Tree** [lowest-bin](#)

**Range** 0 to 9

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **raise-threshold** *number*

**Description** Raise threshold count for excessive delay  
A threshold crossing alarm is raised when the raise-threshold value is reached. The raise threshold is compared to the number of results the `../lowest-bin` and all higher, excluding any results that would be excluded by the `../exclude-lowest-bin`.



<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name string bin-type bin-metric keyword delay-event direction keyword raise-threshold number</a>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **exclude-from-avg** [direction keyword](#)

<b>Description</b>	Enter the exclude-from-avg list instance used to exclude specified bins from their values being included in the average
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name string bin-type bin-metric keyword exclude-from-avg direction keyword</a>
<b>Tree</b>	<a href="#">exclude-from-avg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** [keyword](#)

<b>Description</b>	The direction of the measurement  A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name string bin-type bin-metric keyword exclude-from-avg direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• round-trip</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bins** [string](#)

<b>Description</b>	Bin numbers excluded from the average calculation
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Results mapped to these bins do not impact the delay metric average values.

<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">bin-type bin-metric</a> <i>keyword</i> <a href="#">exclude-from-avg direction</a> <i>keyword</i> <a href="#">bins</a> <i>string</i>
<b>Tree</b>	<a href="#">bins</a>
<b>String Length</b>	1 to 39
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	A description of the bin group
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reference-count** *number*

<b>Description</b>	The number of OAM-PM test sessions referencing the bin-group
<b>Context</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i> <a href="#">reference-count</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loss**

<b>Description</b>	Enter the loss context
<b>Context</b>	<a href="#">oam performance-monitoring ip loss</a>
<b>Tree</b>	<a href="#">loss</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loss-events-template** *loss-events-template-name* *string*

**Description** The delay-template list instance

**Context** [oam performance-monitoring ip loss loss-events-template loss-events-template-name](#) *string*

**Tree** [loss-events-template](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 255

### **loss-events-template-name** *string*

**Description** A description of the template

**Context** [oam performance-monitoring ip loss loss-events-template loss-events-template-name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **avg-flr-event** *direction* *keyword*

**Description** Enter the avg-flr-event list instance

**Context** [oam performance-monitoring ip loss loss-events-template loss-events-template-name](#) *string* [avg-flr-event](#) *direction* *keyword*

**Tree** [avg-flr-event](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

**Description** The direction of the measurement of interest

A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source.

<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *decimal-number*

<b>Description</b>	The value used to clear a previously triggered Frame Loss Ratio alarm Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0.000 to 99.999
<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### raise-threshold *decimal-number*

<b>Description</b>	Raise threshold for the average Frame Loss Ratio This event is computed and considered at the completion of the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">avg-flr-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	0.001 to 100.000

<b>Units</b>	percent
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### chli-event *direction* keyword

<b>Description</b>	Enter the Consecutive High Loss Interval list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">chli-event direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">chli-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### direction *keyword*

<b>Description</b>	The direction of the measurement of interest  A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">chli-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest  Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement
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interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.

<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">chli-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">chli-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	A description of the loss template
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hli-event** [direction](#) *keyword*

<b>Description</b>	Enter the High Loss Interval list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event direction</a> <i>keyword</i>

<b>Tree</b>	<a href="#">hli-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event</a> <i>direction</i> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event</a> <i>direction</i> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">hli-event direction keyword</a> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reference-count** *number*

<b>Description</b>	The number of OAM-PM test sessions referencing the loss template
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">reference-count</a> <i>number</i>
<b>Tree</b>	<a href="#">reference-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unavailability-event** [direction](#) *keyword*

<b>Description</b>	Enter the unavailability-event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event</a> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">unavailability-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
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<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

<b>Description</b>	<p>The value used to clear a previously triggered alarm for the metric of interest</p> <p>Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **raise-threshold** *number*

<b>Description</b>	<p>Raise threshold for the metric of interest</p> <p>This event is computed and considered during the measurement interval.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">unavailability-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undetermined-availability-event *direction* keyword

**Description** Enter the undetermined availability event list instance

**Context** [oam performance-monitoring ip loss loss-events-template loss-events-template-name](#) *string* [undetermined-availability-event](#) *direction* keyword

**Tree** [undetermined-availability-event](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### *direction* keyword

**Description** The direction of the measurement of interest  
A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.

**Context** [oam performance-monitoring ip loss loss-events-template loss-events-template-name](#) *string* [undetermined-availability-event](#) *direction* keyword

**Options**

- forward
- backward
- aggregate

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-threshold *number*

**Description** The value used to clear a previously triggered alarm for the metric of interest  
Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.

<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-availability-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-availability-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-unavailability-event** [direction](#) *keyword*

<b>Description</b>	Enter the undetermined unavailability event list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">undetermined-unavailability-event</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
--------------------	--

<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear-threshold** *number*

<b>Description</b>	The value used to clear a previously triggered alarm for the metric of interest Two type of threshold crossing alarms; Stateless and Stateful. When the clear-threshold is not specified the type = stateless. Stateless alarms are not maintained across measurement interval boundaries. Each measurement interval is self-contained. When a clear-threshold is configured the type = stateful. Stateful alarms are maintained across measurement interval boundaries and cleared when a subsequent measurement interval completes and meets the clear threshold criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">clear-threshold</a>
<b>Range</b>	0 to 863999
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **raise-threshold** *number*

<b>Description</b>	Raise threshold for the metric of interest This event is computed and considered during the measurement interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i> <a href="#">undetermined-unavailability-event direction</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">raise-threshold</a>
<b>Range</b>	1 to 864000
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session** *session-name string*

**Description** Enter the session list instance which contains the test session configuration

**Context** [oam performance-monitoring ip session session-name string](#)

**Tree** [session](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-name** *string*

**Description** The name of the OAM-PM session

**Context** [oam performance-monitoring ip session session-name string](#)

**String Length** 1 to 32

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

**Description** A description of the OAM-PM session

**Context** [oam performance-monitoring ip session session-name string description string](#)

**Tree** [description](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** (*ipv4-address | ipv6-address*)

**Description** Destination IP address for the IP test session

**Context** [oam performance-monitoring ip session session-name string destination-ip \(ipv4-address | ipv6-address\)](#)

**Tree** [destination-ip](#)

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-udp-port** *number*

<b>Description</b>	Destination UDP port for the test session This must match the UDP listening port on the Session Reflector.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">destination-udp-port</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-udp-port</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp** (*number | keyword*)

<b>Description</b>	DSCP used in IP header of the STAMP PDU
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">dscp</a> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Default</b>	CS6
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> </ul>

- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding****Description**

Control the local forwarding decision on the source

**Context**[oam performance-monitoring ip session session-name string forwarding](#)**Tree**[forwarding](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-ref****Description**

Enter the interface-ref context

**Context**[oam performance-monitoring ip session session-name string forwarding interface-ref](#)**Tree**[interface-ref](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface *reference*****Description**

Reference to a base interface, for example a port

**Context**[oam performance-monitoring ip session session-name string forwarding interface-ref interface \*reference\*](#)

<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *reference*

<b>Description</b>	Subinterface to send the test packet The subinterface must be a valid route to reach the destination
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">forwarding interface-ref subinterface</a> <i>reference</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address of the next hop The next hop must have a valid route in the route-table of the network instance.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">forwarding next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *reference*

<b>Description</b>	The forwarding class When value not specified, the sgt-qos value will be used
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>



<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### measurement-interval [mi-duration](#) *keyword*

<b>Description</b>	The list of measurement intervals associated with the OAM-PM session
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i>
<b>Tree</b>	<a href="#">measurement-interval</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

### mi-duration *keyword*

<b>Description</b>	<p>Configure the measurement interval duration</p> <p>The measurement interval duration defines the length of the sample window over which the statistics are collected, computed, and stored. The system automatically instantiates a 'raw' measurement interval for each defined test session. The 'raw' measurement interval is unbounded and continually accumulates measurements while the test session admin-state has value 'enable'. The 'raw' measurement interval can have result cleared to flush restart the accumulation of statistics.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1-minute</li> <li>• 5-minutes</li> <li>• 15-minutes</li> <li>• 1-hour</li> <li>• 1-day</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**boundary-type** *keyword*

<b>Description</b>	Aligning the start of the measurement interval  A value 'clock-aligned' aligns the start and end of the sample window with the time-of-day clock. A value 'test-aligned' aligns the sample window with the start of the test session.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">boundary-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">boundary-type</a>
<b>Default</b>	clock-aligned
<b>Options</b>	<ul style="list-style-type: none"> <li>• clock-aligned</li> <li>• test-relative</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clock-offset** *number*

<b>Description</b>	Aligning the measurement interval using an offset for the start, considering the boundary-type  The clock-offset must be '0' when the boundary-type value is not 'clock-aligned'. When the boundary-type is 'clock-aligned' the value of the clock-offset must be less than the duration of the measurement-interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">clock-offset</a> <i>number</i>
<b>Tree</b>	<a href="#">clock-offset</a>
<b>Range</b>	0 to 86399
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**intervals-stored** *number*

<b>Description</b>	The number of completed measurement intervals stored in volatile memory before overwriting oldest  The more intervals stored the more memory will be consumed. The values vary per measurement interval duration.
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1-minute default 32 maximum 96 5-minutes default 32 maximum 96 15-minutes default 32 maximum 96 1-hour default 24 maximum 24 1-day default 1 maximum 1

The total of 1-minute, plus 5-minutes, plus 15-minutes cannot exceed 96. That is a shared pool between those measurement intervals.

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">intervals-stored</a> <i>number</i>
<b>Tree</b>	<a href="#">intervals-stored</a>
<b>Range</b>	1 to 96
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## threshold-alerts

<b>Description</b>	Enabling configured events for the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts</a>
<b>Tree</b>	<a href="#">threshold-alerts</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delay-event *keyword*

<b>Description</b>	Enable the delay events associated with the bin group assigned to this test session for this measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts delay-event</a> <i>keyword</i>
<b>Tree</b>	<a href="#">delay-event</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-event** *keyword*

<b>Description</b>	Enable the loss events associated with the loss test session for this measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">measurement-interval mi-duration</a> <i>keyword</i> <a href="#">threshold-alerts loss-event</a> <i>keyword</i>
<b>Tree</b>	<a href="#">loss-event</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** *reference*

<b>Description</b>	The name of the network instance specific to this test session
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	The profile or drop precedence When value not specified, the sgt-qos value will be used
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in The second level priority profile</li> <li>• out The lowest level priority profile</li> <li>• exceed The third level priority profile</li> <li>• in-plus</li> </ul>

The highest priority profile

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-type** *keyword*

<b>Description</b>	Session scheduling type for the test sessions configured under this OAM-PM session  A value 'proactive' means the protocol specific test session will be always on when admin-state is 'enable'. A value 'on-demand' requires the tools start command to be issued for test session with admin-state 'enable'
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string session-type keyword</a>
<b>Tree</b>	<a href="#">session-type</a>
<b>Default</b>	proactive
<b>Options</b>	<ul style="list-style-type: none"> <li>proactive</li> <li>on-demand</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-ip** (*ipv4-address | ipv6-address*)

<b>Description</b>	Source IPv4 or IPv6 IP address to be used as the source address of the packet
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string source-ip (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-udp-port** *number*

<b>Description</b>	Automatically allocate or statically configure the source UDP port for oam pm ip
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The value 0 will automatically select an available source UDP port from the dynamic range. When selecting a source UDP port from the from the reserved STAMP pool [64374..64383] that port must be administratively assigned to the STAMP application attempting to use it. Once a UDP port in this range is assigned to one application it cannot be used by the other application. When a test has been configured to use one of UDP ports from the reserved STAMP pool the application-assignment of that UDP port cannot be modified.

Allocation of these UDP ports can be found at srl\_nokia-udp-source-pool.yang model (path oam ippm source-udp-pools).

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string source-udp-port number</a>
<b>Tree</b>	<a href="#">source-udp-port</a>
<b>Range</b>	0   64374 to 64383
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-udp-port-in-use *number*

<b>Description</b>	Source UDP port used in the packet
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string source-udp-port-in-use number</a>
<b>Tree</b>	<a href="#">source-udp-port-in-use</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp

<b>Description</b>	Enter the stamp context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp</a>
<b>Tree</b>	<a href="#">stamp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state of the STAMP test session
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay**

<b>Description</b>	Enter the delay context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp delay</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-group** *reference*

<b>Description</b>	Reference the bin group to be used for this session. If not specified the 'default' bin-group will be used
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp delay bin-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">bin-group</a>
<b>Default</b>	default
<b>Reference</b>	<a href="#">oam performance-monitoring ip delay bin-group bin-group-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-group-binning** *keyword*

<b>Description</b>	The current binning of delay metric values  A value 'active' means the bin-group being referenced by the test session has an admin-state 'enable'. A value 'inactive' means the bin-group being referenced by the test session has an admin-state 'disable'. When the value is 'inactive' test packets are being transmitted but there is no bin-group to bin the result and the delay results are discarded.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay bin-group-binning keyword</a>
<b>Tree</b>	<a href="#">bin-group-binning</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-events** [bin-metric keyword direction keyword](#)

<b>Description</b>	A list of delay events for the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay delay-events bin-metric keyword direction keyword</a>
<b>Tree</b>	<a href="#">delay-events</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-metric** *keyword*

<b>Description</b>	Delay metric
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay delay-events bin-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• fd</li> <li>• fdr</li> <li>• ifdv</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**direction** *keyword*

<b>Description</b>	The direction of the measurement  A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'round-trip' is the measurement of the complete path using four timestamps.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay delay-events bin-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• round-trip</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-tca-time** *string*

<b>Description</b>	UTC date and time at the start of the measurement interval which generated most recent raise or clear
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay delay-events bin-metric keyword direction keyword last-tca-time string</a>
<b>Tree</b>	<a href="#">last-tca-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the Threshold Crossing Alerts (TCAs)  The conditions are evaluated in the order shown.  The value 'pending' is returned if the threshold configuration for the specified indices changed during the current measurement interval. The threshold configuration is evaluated in the next full measurement interval after the new configuration.  The value 'active' is returned if the specified indices have a no clear threshold configured (stateless), and the current measurement interval has generated a Raise TCA. The value is also returned if the specified indices have a clear threshold configured (stateful), and the most recent TCA generated was a Raise.
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The value 'not-active' is returned for all other conditions (e.g., thresholding is not configured for the specified indices).

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay delay-events bin-metric keyword direction keyword oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• active</li> <li>• not-active</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### measurement-result [mi-ro-type keyword](#)

<b>Description</b>	The test statistics for a delay measurement
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword</a>
<b>Tree</b>	<a href="#">measurement-result</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mi-ro-type [keyword](#)

<b>Description</b>	The duration of the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1-minute</li> <li>• 5-minutes</li> <li>• 15-minutes</li> <li>• 1-hour</li> <li>• 1-day</li> <li>• raw</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *index number*

<b>Description</b>	Enter the index list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	Measurement interval unique identifier
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**elapsed-time** *number*

<b>Description</b>	Time elapsed since data collection started for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number elapsed-time number</a>
<b>Tree</b>	<a href="#">elapsed-time</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number oper-state keyword</a>

<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in-progress</a></li> <li>• <a href="#">completed</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	The time that the current measurement interval started
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number start-time string</a>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-type** [bin-metric](#) *keyword*

<b>Description</b>	Enter the bin-type list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword</a>
<b>Tree</b>	<a href="#">bin-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-metric keyword**

<b>Description</b>	The identifier of a bin type within a bin group
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• fd</li> <li>• fdr</li> <li>• ifdv</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backward**

<b>Description</b>	Enter the backward context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward</a>
<b>Tree</b>	<a href="#">backward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number**

<b>Description</b>	Average delay metric in the backward direction, from reflector to source This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay metric in the backward direction, from reflector to source This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay metric in the backward direction, from reflector to source This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword backward minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin [bin-number](#) number**

<b>Description</b>	Enter the bin list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number</a>
<b>Tree</b>	<a href="#">bin</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bin-number** *number*

<b>Description</b>	The number of the bin
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number</a>
<b>Range</b>	0 to 9
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backward-measurements** *number*

<b>Description</b>	Number of backward direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number backward-measurements number</a>
<b>Tree</b>	<a href="#">backward-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forward-measurements** *number*

<b>Description</b>	Number of forward direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number forward-measurements number</a>
<b>Tree</b>	<a href="#">forward-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip-measurements** *number*

<b>Description</b>	Number of round trip direction delay metric results within the bins range
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword bin bin-number number round-trip-measurements number</a>
<b>Tree</b>	<a href="#">round-trip-measurements</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forward**

<b>Description</b>	Enter the forward context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward</a>
<b>Tree</b>	<a href="#">forward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average** *number*

<b>Description</b>	Average delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**maximum number**

<b>Description</b>	Maximum delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay metric in the forward direction, from source to reflector This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword forward minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**round-trip**

<b>Description</b>	Enter the round-trip context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip</a>
<b>Tree</b>	<a href="#">round-trip</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average number**

<b>Description</b>	Average delay metric round trip, source computed based on four timestamps This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip average number</a>
<b>Tree</b>	<a href="#">average</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum number**

<b>Description</b>	Maximum delay metric round trip, source computed based on four timestamps This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum number**

<b>Description</b>	Minimum delay metric round trip, source computed based on four timestamps This is for the specific direction, test session, interval duration, interval number, and bin type.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics bin-type bin-metric keyword round-trip minimum number</a>
<b>Tree</b>	<a href="#">minimum</a>

<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-received *number*

<b>Description</b>	Number of test frames received for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics frames-received number</a>
<b>Tree</b>	<a href="#">frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-transmitted *number*

<b>Description</b>	Number of test frames sent for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp delay measurement-result mi-ro-type keyword index index number statistics frames-transmitted number</a>
<b>Tree</b>	<a href="#">frames-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### suspect-status *boolean*

<b>Description</b>	<p>Whether the Measurement Interval has been marked as suspect</p> <p>The object is to be set to 'false' at the start of a measurement interval. It is set to 'true' when there is a discontinuity in the performance measurements during the Measurement Interval. This flag is used to warn operators if the result count in the measurement interval is suboptimal for considering the results valid. Results are still collected, computed, and stored regardless of this flag. This is meant as a post processing notification to an external system.</p> <p>Conditions for a discontinuity include, but are not limited to the following:</p>
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1 - The local time-of-day clock is adjusted by at least 10 seconds  
 2 - The test is halted before the current Measurement Interval is completed  
 3 - A local test failure, or reconfiguration that disrupts testing

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp</a> <a href="#">delay</a> <a href="#">measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">index</a> <a href="#">index</a> <i>number</i> <a href="#">suspect-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">suspect-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **newest-index** *number*

<b>Description</b>	The number of the newest measurement interval index for the specified session and test type
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp</a> <a href="#">delay</a> <a href="#">measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">newest-index</a> <i>number</i>
<b>Tree</b>	<a href="#">newest-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **detected-tx-error** *keyword*

<b>Description</b>	Reason for the specified test session's current inability (if any) to launch request frames  For example, 'eth-parent-admin-down(4)' could be returned for a test if the MEP to be tested is associated with a subinterface which is administratively down.  Not all request frame transmit failures are detected by this mechanism. It is possible that the value 'none' will be returned when the test is unable to transmit frames during undetectable transmission errors.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp</a> <a href="#">detected-tx-error</a> <i>keyword</i>
<b>Tree</b>	<a href="#">detected-tx-error</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• port-down</li> <li>• no-tx-port</li> <li>• eth-parent-admin-down</li> <li>• eth-no-mep-or-admin-down</li> </ul>

- unexpected-error
- network-instance-admin-down
- network-instance-oper-down
- no-subinterface
- no-direct-subinterface
- source-subinterface-down
- source-ip-not-local
- next-hop-ip-is-local
- dest-mac-resolve-fail

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interval** *keyword***Description**

The transmission rate of the STAMP packets

**Context**[oam performance-monitoring ip session session-name](#) *string* [stamp interval](#) *keyword***Tree**[interval](#)**Default**

1s

**Options**

- 50ms
- 100ms
- 200ms
- 300ms
- 400ms
- 500ms
- 600ms
- 700ms
- 800ms
- 900ms
- 1s
- 10s

**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss**

<b>Description</b>	Enter the loss context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss</a>
<b>Tree</b>	<a href="#">loss</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**flr-threshold *number***

<b>Description</b>	<p>Frame Loss Ratio (FLR) is a percentage applied to the frame loss within a delta-t</p> <p>If the FLR is not reached the delta-t is not considered a High Loss Interval. If the FLR is reach the delta-t is considered a High Loss Interval.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss flr-threshold number</a>
<b>Tree</b>	<a href="#">flr-threshold</a>
<b>Range</b>	0 to 100
<b>Default</b>	50
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**hli-force-count *boolean***

<b>Description</b>	<p>Increment High Loss Interval and Consecutive High Loss Interval counters regardless of unavailability</p> <p>A value 'false' will not increment the HLI/CHLI counters during times of unavailability. A value 'true' will increment the HLI/CHLI counters during times of unavailability.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss hli-force-count boolean</a>
<b>Tree</b>	<a href="#">hli-force-count</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-event** *reference*

<b>Description</b>	The loss event template associated with this loss test session and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss loss-event</a> <i>reference</i>
<b>Tree</b>	<a href="#">loss-event</a>
<b>Reference</b>	<a href="#">oam performance-monitoring ip loss loss-events-template loss-events-template-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-events** [loss-metric](#) *keyword* [direction](#) *keyword*

<b>Description</b>	Enter the loss events list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss loss-events</a> <a href="#">loss-metric</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">loss-events</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loss-metric** *keyword*

<b>Description</b>	Loss metric
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss loss-events</a> <a href="#">loss-metric</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• average-flr</li> <li>• chli</li> <li>• hli</li> <li>• unavailability</li> <li>• undetermined-availability</li> <li>• undetermined-unavailability</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of the measurement of interest A value 'forward' is the measurement from source to reflector. A value 'backward' is the measurement from reflector to source. A value 'aggregate' sums the forward and backward counts into an aggregate.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss loss-events loss-metric keyword direction keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• forward</li> <li>• backward</li> <li>• aggregate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-tca-time** *string*

<b>Description</b>	UTC date and time at the start of the measurement interval which generated most recent raise or clear
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss loss-events loss-metric keyword direction keyword last-tca-time string</a>
<b>Tree</b>	<a href="#">last-tca-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the Threshold Crossing Alerts (TCAs) for the specified session The conditions are evaluated in the order shown. The value 'pending' is returned if the threshold configuration for the specified indices changed during the current measurement interval. The value 'active' is returned if the specified indices have a default clear threshold configured, and the current measurement interval has generated a Raise TCA. The value is also returned if the specified indices have a non-default clear threshold configured, and the most recent TCA generated was a Raise.
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The value 'not-active' is returned for all other conditions (e.g. thresholding is not configured for the specified indices).

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss loss-events loss-metric keyword direction keyword oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• active</li> <li>• not-active</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### measurement-result [mi-ro-type keyword](#)

<b>Description</b>	The test statistics for a delay measurement
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword</a>
<b>Tree</b>	<a href="#">measurement-result</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mi-ro-type [keyword](#)

<b>Description</b>	The duration of the measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 1-minute</li> <li>• 5-minutes</li> <li>• 15-minutes</li> <li>• 1-hour</li> <li>• 1-day</li> <li>• raw</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *index number*

<b>Description</b>	Enter the index list instance
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	Interval identifier.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**elapsed-time** *number*

<b>Description</b>	Time elapsed since data collection started for the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number elapsed-time number</a>
<b>Tree</b>	<a href="#">elapsed-time</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Operational state of the specified measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number oper-state keyword</a>

<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in-progress</a></li> <li>• <a href="#">completed</a></li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	The time that the current measurement interval started
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number start-time string</a>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**backward**

<b>Description</b>	Enter the backward context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward</a>
<b>Tree</b>	<a href="#">backward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available** *number*

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward available number</a>
<b>Tree</b>	<a href="#">available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average-frame-loss-ratio** *number*

<b>Description</b>	Average Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward average-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">average-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**consecutive-high-loss-intervals** *number*

<b>Description</b>	Number of Consecutive High Loss Intervals (CHLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward consecutive-high-loss-intervals number</a>
<b>Tree</b>	<a href="#">consecutive-high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**high-loss-intervals** *number*

<b>Description</b>	Number of High Loss Intervals (HLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward high-loss-intervals number</a>
<b>Tree</b>	<a href="#">high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-loss** *number*

<b>Description</b>	Loss in the backward direction The difference between the received packets on the session-sender and the packets sent from the session-reflector.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward in-loss number</a>
<b>Tree</b>	<a href="#">in-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-frame-loss-ratio** *number*

<b>Description</b>	Maximum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward maximum-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">maximum-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-frame-loss-ratio** *number*

<b>Description</b>	Minimum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward minimum-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">minimum-frame-loss-ratio</a>
<b>Units</b>	millipercen
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unavailable** *number*

<b>Description</b>	Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward unavailable number</a>
<b>Tree</b>	<a href="#">unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-available** *number*

<b>Description</b>	<p>Number of availability indicators evaluated as Available for the specified direction and measurement interval, based on extrapolation</p> <p>Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should be used to adjust the availability counter if the reason was packet loss and not an administrative function that caused the condition.</p>
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<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward undetermined-available number</a>
<b>Tree</b>	<a href="#">undetermined-available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### undetermined-unavailable number

<b>Description</b>	<p>Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval, based on extrapolation</p> <p>Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should not be used to adjust the unavailability counter if the reason was packet loss and not an administrative function that caused the condition.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics backward undetermined-unavailable number</a>
<b>Tree</b>	<a href="#">undetermined-unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forward

<b>Description</b>	Enter the forward context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward</a>
<b>Tree</b>	<a href="#">forward</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**available** *number*

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward available number</a>
<b>Tree</b>	<a href="#">available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**average-frame-loss-ratio** *number*

<b>Description</b>	Average Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward average-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">average-frame-loss-ratio</a>
<b>Units</b>	millipercents
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**consecutive-high-loss-intervals** *number*

<b>Description</b>	Number of Consecutive High Loss Intervals (CHLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward consecutive-high-loss-intervals number</a>
<b>Tree</b>	<a href="#">consecutive-high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**high-loss-intervals** *number*

<b>Description</b>	Number of High Loss Intervals (HLIs) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward high-loss-intervals number</a>
<b>Tree</b>	<a href="#">high-loss-intervals</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-frame-loss-ratio** *number*

<b>Description</b>	Maximum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward maximum-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">maximum-frame-loss-ratio</a>
<b>Units</b>	millipercen
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-frame-loss-ratio** *number*

<b>Description</b>	Minimum Frame Loss Ratio (FLR) for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward minimum-frame-loss-ratio number</a>
<b>Tree</b>	<a href="#">minimum-frame-loss-ratio</a>
<b>Units</b>	millipercen
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-loss number**

<b>Description</b>	Loss in the forward direction  The difference between the received packets on the session-reflector and the packets sent from the session-sender.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward out-loss number</a>
<b>Tree</b>	<a href="#">out-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unavailable number**

<b>Description</b>	Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward unavailable number</a>
<b>Tree</b>	<a href="#">unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**undetermined-available number**

<b>Description</b>	Number of availability indicators evaluated as Available for the specified direction and measurement interval, based on extrapolation  Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should be used to adjust the availability counter if the reason was packet loss and not an administrative function that caused the condition.
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<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward undetermined-available number</a>
<b>Tree</b>	<a href="#">undetermined-available</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **undetermined-unavailable number**

<b>Description</b>	<p>Number of availability indicators evaluated as Unavailable for the specified direction and measurement interval, based on extrapolation</p> <p>Undetermined counters are incremented when there is no explicit understanding why a response packet was not received. This will occur during a complete failure where no responses are received on the source and the source must time out those missing responses. This counter will increment when the availability window has been reached plus an additional five second timeout. Previous state must be maintained but the appropriate undetermined counter will increment by the equal value. This value should not be used to adjust the unavailability counter if the reason was packet loss and not an administrative function that caused the condition.</p>
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics forward undetermined-unavailable number</a>
<b>Tree</b>	<a href="#">undetermined-unavailable</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **frames-received number**

<b>Description</b>	Number of test session frames received for the specified direction and measurement interval
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics frames-received number</a>
<b>Tree</b>	<a href="#">frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frames-transmitted *number*

**Description** Number of test session frames transmitted for the specified direction and measurement interval

**Context** [oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number statistics frames-transmitted number](#)

**Tree** [frames-transmitted](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### suspect-status *boolean*

**Description** Whether the Measurement Interval has been marked as suspect

The object is to be set to 'false' at the start of a measurement interval. It is set to 'true' when there is a discontinuity in the performance measurements during the Measurement Interval. This flag is used to warn operators if the result count in the measurement interval is suboptimal for considering the results valid. Results are still collected, computed, and stored regardless of this flag. This is meant as a post processing notification to an external system.

Conditions for a discontinuity include, but are not limited to the following:

- 1 - The local time-of-day clock is adjusted by at least 10 seconds
- 2 - The test is halted before the current Measurement Interval is completed
- 3 - A local test failure, or reconfiguration that disrupts testing

**Context** [oam performance-monitoring ip session session-name string stamp loss measurement-result mi-ro-type keyword index index number suspect-status boolean](#)

**Tree** [suspect-status](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**newest-index** *number*

<b>Description</b>	The number of the newest measurement interval index for the specified session and test type
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss measurement-result mi-ro-type</a> <i>keyword</i> <a href="#">newest-index</a> <i>number</i>
<b>Tree</b>	<a href="#">newest-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timing**

<b>Description</b>	Enter the timing context used to configure availability options
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss timing</a>
<b>Tree</b>	<a href="#">timing</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**chli-threshold** *number*

<b>Description</b>	Consecutive High Loss Interval (CHLI) threshold  The threshold of consecutive delta-ts within a sliding availability window that will cause this counter to increment. The CHLI counter will increment a maximum of one time for any given availability window. The values provide information on the number of consecutive HLIs that occurred in an availability window without meeting the unavailability criteria.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name</a> <i>string</i> <a href="#">stamp loss timing chli-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">chli-threshold</a>
<b>Range</b>	1 to 9
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**consecutive-delta-t** *number*

<b>Description</b>	Number of consecutive delta-t that comprise the availability/unavailability sliding window, must not exceed 100 seconds  Availability and unavailability state changes will occur when the sliding window is completely comprised of a different state values than the current state
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss timing consecutive-delta-t number</a>
<b>Tree</b>	<a href="#">consecutive-delta-t</a>
<b>Range</b>	2 to 10
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frames-per-delta-t** *number*

<b>Description</b>	Number of frames that comprise one delta-t used for comparison to FLR configuration  The length of the delta-t window is frames-per-delta-t * the probe interval.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp loss timing frames-per-delta-t number</a>
<b>Tree</b>	<a href="#">frames-per-delta-t</a>
<b>Range</b>	1 to 50
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Enter the oper-state context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> </ul>

- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pad-tlv-size** *number***Description**

The PAD TLV byte count used to increase the size of the base STAMP PDU

A value '0' means no PAD TLV is added. Any other value represents the size of the PAD TLV.

<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp pad-tlv-size number</a>
<b>Tree</b>	<a href="#">pad-tlv-size</a>
<b>Range</b>	0   3 to 9502
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-session-identifier *number*

<b>Description</b>	STAMP session identifier (SSID) included in the STAMP test packet
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp stamp-session-identifier number</a>
<b>Tree</b>	<a href="#">stamp-session-identifier</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-malformed-flag-received *number*

<b>Description</b>	Indicates the count of packets in this sample window with the M (Malformed) bit set in the flags field of the TLV.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp statistics stamp-malformed-flag-received number</a>
<b>Tree</b>	<a href="#">stamp-malformed-flag-received</a>



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp-unrecognized-flag-received *number*

<b>Description</b>	Indicates the count of packets in this sample window with the U (Unrecognized) bit set in the flags field of the TLV.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp statistics stamp-unrecognized-flag-received number</a>
<b>Tree</b>	<a href="#">stamp-unrecognized-flag-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-duration *number*

<b>Description</b>	Duration of an OAM-PM session with a session-type on-demand When this leaf is not specified the on-demand test will execute until manually stopped.
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp test-duration number</a>
<b>Tree</b>	<a href="#">test-duration</a>
<b>Range</b>	1 to 86400
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-id (*number* | *keyword*)

<b>Description</b>	Test ID of the test session Test IDs are protocol specific. The same value may be re-used for different protocols but not for the same protocol. When the value 'auto' is configured the test-id is dynamically assigned from the upper 32-bit range, [2147483648..2247483647]
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp test-id (number   keyword)</a>
<b>Tree</b>	<a href="#">test-id</a>

<b>Range</b>	0 to 2147483647
<b>Default</b>	auto
<b>Options</b>	• auto
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-id-in-use *number*

<b>Description</b>	Test ID allocated to the test session
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string stamp test-id-in-use number</a>
<b>Tree</b>	<a href="#">test-id-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ttl *number*

<b>Description</b>	TTL value for the IP packet
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string ttl number</a>
<b>Tree</b>	<a href="#">ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### service-activation-testhead

<b>Description</b>	Enter the service-activation-testhead context
<b>Context</b>	<a href="#">oam service-activation-testhead</a>
<b>Tree</b>	<a href="#">service-activation-testhead</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**acceptance-criteria-template** *ac-template-name string*

<b>Description</b>	Enter the acceptance-criteria-template list instance
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name string</a>
<b>Tree</b>	<a href="#">acceptance-criteria-template</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	100

**ac-template-name** *string*

<b>Description</b>	Acceptance criteria template name
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name string</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir-threshold** *number*

<b>Description</b>	CIR threshold
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name string cir-threshold number</a>
<b>Tree</b>	<a href="#">cir-threshold</a>
<b>Range</b>	1 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delay-threshold** *number*

<b>Description</b>	Delay threshold configuration for acceptance criteria template
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name string delay-threshold number</a>

<b>Tree</b>	<a href="#">delay-threshold</a>
<b>Range</b>	1 to 100000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delay-var-threshold** *number*

<b>Description</b>	Delay variation threshold configuration for acceptance criteria template
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">delay-var-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">delay-var-threshold</a>
<b>Range</b>	1 to 100000000
<b>Units</b>	microseconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	Text description
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loss-threshold** *decimal-number*

<b>Description</b>	Loss threshold for acceptance criteria template
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">loss-threshold</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">loss-threshold</a>
<b>Range</b>	0.0000 to 100.0000

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### loss-threshold-policing *decimal-number*

<b>Description</b>	Frame loss ratio for a policing test
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">loss-threshold-policing</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">loss-threshold-policing</a>
<b>Range</b>	0.0000 to 100.0000
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### m-factor *number*

<b>Description</b>	Throughput margin configuration
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">m-factor</a> <i>number</i>
<b>Tree</b>	<a href="#">m-factor</a>
<b>Range</b>	1 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pir-threshold *number*

<b>Description</b>	PIR threshold
<b>Context</b>	<a href="#">oam service-activation-testhead acceptance-criteria-template ac-template-name</a> <i>string</i> <a href="#">pir-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">pir-threshold</a>
<b>Range</b>	1 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frame-size-template** *fs-template-name string*

<b>Description</b>	Enter the frame-size-template list instance
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string</a>
<b>Tree</b>	<a href="#">frame-size-template</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	100

**fs-template-name** *string*

<b>Description</b>	Frame size template name
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-a** *number*

<b>Description</b>	Size-a
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string</a> <a href="#">size-a number</a>
<b>Tree</b>	<a href="#">size-a</a>
<b>Range</b>	64 to 9212
<b>Default</b>	64
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-b** *number*

<b>Description</b>	Size-b
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string</a> <a href="#">size-b number</a>

<b>Tree</b>	<a href="#">size-b</a>
<b>Range</b>	64 to 9212
<b>Default</b>	128
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-c number**

<b>Description</b>	Size-c
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string size-c number</a>
<b>Tree</b>	<a href="#">size-c</a>
<b>Range</b>	64 to 9212
<b>Default</b>	256
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-d number**

<b>Description</b>	Size-d
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string size-d number</a>
<b>Tree</b>	<a href="#">size-d</a>
<b>Range</b>	64 to 9212
<b>Default</b>	512
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-e number**

<b>Description</b>	Size-e
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<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name</a> <i>string</i> <a href="#">size-e</a> <i>number</i>
<b>Tree</b>	<a href="#">size-e</a>
<b>Range</b>	64 to 9212
<b>Default</b>	1024
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-f** *number*

<b>Description</b>	Size-f
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name</a> <i>string</i> <a href="#">size-f</a> <i>number</i>
<b>Tree</b>	<a href="#">size-f</a>
<b>Range</b>	64 to 9212
<b>Default</b>	1280
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-g** *number*

<b>Description</b>	Size-g
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name</a> <i>string</i> <a href="#">size-g</a> <i>number</i>
<b>Tree</b>	<a href="#">size-g</a>
<b>Range</b>	64 to 9212
<b>Default</b>	1518
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**size-h number**

<b>Description</b>	Size-h
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string size-h number</a>
<b>Tree</b>	<a href="#">size-h</a>
<b>Range</b>	64 to 9212
<b>Default</b>	9212
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-u number**

<b>Description</b>	Size-u
<b>Context</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name string size-u number</a>
<b>Tree</b>	<a href="#">size-u</a>
<b>Range</b>	64 to 9212
<b>Default</b>	2000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**results**

<b>Description</b>	Enter the service-activation-testhead context
<b>Context</b>	<a href="#">oam service-activation-testhead results</a>
<b>Tree</b>	<a href="#">results</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-test test-name string**

<b>Description</b>	Enter the service-test list instance
<b>Context</b>	<a href="#">oam service-activation-testhead results service-test test-name string</a>
<b>Tree</b>	<a href="#">service-test</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-name string**

<b>Description</b>	Service activation test name
<b>Context</b>	<a href="#">oam service-activation-testhead results service-test test-name string</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-test test-name string test-run number**

<b>Description</b>	Enter the service-test list instance
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number</a>
<b>Tree</b>	<a href="#">service-test</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-name** *string*

<b>Description</b>	The name of the Service Activation Test
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number</i>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-run** *number*

<b>Description</b>	The run number of the OAM Service Activation service-test run to be read
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**accounting-oper-state** *keyword*

<b>Description</b>	Indicates the operational status of the transfer of the service-test run's results to the accounting log
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number accounting-oper-state keyword</i>
<b>Tree</b>	<a href="#">accounting-oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• ready-to-send</li> <li>• sent</li> <li>• unable-to-send</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	Configure the description of the service test
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<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number description string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Indicates the operational state of the service-test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number oper-state keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• running</li> <li>• stopped-by-user</li> <li>• passed</li> <li>• failed</li> <li>• stopped-by-fault</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-stream** [stream-id](#) *number*

<b>Description</b>	Enter the service-stream list instance
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number service-stream stream-id number</i>
<b>Tree</b>	<a href="#">service-stream</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stream-id** *number*

<b>Description</b>	The number of the service stream to be configured or read
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<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number</a>
<b>Range</b>	1 to 8
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### acceptance-criteria-template *string*

<b>Description</b>	Configure the acceptance criteria template for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number acceptance-criteria-template string</a>
<b>Tree</b>	<a href="#">acceptance-criteria-template</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cir-threshold *number*

<b>Description</b>	Indicates the value of /test-oam/service-activation-testhead/acceptance-criteria-template/cir-threshold when the test run started
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number cir-threshold number</a>
<b>Tree</b>	<a href="#">cir-threshold</a>
<b>Range</b>	0 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-threshold *number*

<b>Description</b>	Indicates the value of /test-oam/service-activation-testhead/acceptance-criteria-template/delay-threshold when the test run started
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<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number delay-threshold number</a>
<b>Tree</b>	<a href="#">delay-threshold</a>
<b>Range</b>	0 to 100000000
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delay-var-threshold** *number*

<b>Description</b>	Indicates the value of <code>/test-oam/service-activation-testhead/acceptance-criteria-template/delay-var-threshold</code> when the test run started
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number delay-var-threshold number</a>
<b>Tree</b>	<a href="#">delay-var-threshold</a>
<b>Range</b>	0 to 100000000
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	Configure the description of the service test
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **frame-mix**

<b>Description</b>	Enter the frame-mix context
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<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-mix</a>
<b>Tree</b>	<a href="#">frame-mix</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frame-size-template *string*

<b>Description</b>	Configure the frame size template for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-mix frame-size-template string</a>
<b>Tree</b>	<a href="#">frame-size-template</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sequence *string*

<b>Description</b>	Configure the sequence of frame sizes for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-mix sequence string</a>
<b>Tree</b>	<a href="#">sequence</a>
<b>String Length</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frame-payload

<b>Description</b>	Enter the frame-payload context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload</a>
<b>Tree</b>	<a href="#">frame-payload</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## data-pattern

**Description** Enter the data-pattern context

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload data-pattern](#)

**Tree** [data-pattern](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## repeat (*hex-string* | *number*)

**Description** Repeated 4-byte pattern to pad each packet sent

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload data-pattern repeat \(\*hex-string\* | \*number\*\)](#)

**Tree** [repeat](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ethernet

**Description** Enter the ethernet context

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet](#)

**Tree** [ethernet](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## c-tag

**Description** Enter the c-tag context



<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet c-tag</a>
<b>Tree</b>	<a href="#">c-tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discard-eligible** *boolean*

<b>Description</b>	Enable marking of the DEI bit in the VLAN header
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet c-tag discard-eligible boolean</a>
<b>Tree</b>	<a href="#">discard-eligible</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dot1p** *number*

<b>Description</b>	PCP of Ethernet frames for service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet c-tag dot1p number</a>
<b>Tree</b>	<a href="#">dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-mac-address** *string*

<b>Description</b>	Destination MAC address of Ethernet frames
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet destination-mac-address string</a>
<b>Tree</b>	<a href="#">destination-mac-address</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## eth-cfm

**Description** Enter the eth-cfm context

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet eth-cfm](#)

**Tree** [eth-cfm](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## source

**Description** Enter the source context

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet eth-cfm source](#)

**Tree** [source](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## association-id *string*

**Description** Source Ethernet maintenance association name

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet eth-cfm source association-id string](#)

**Tree** [association-id](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## domain-id *string*

**Description** Source Ethernet maintenance domain name

<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet eth-cfm source domain-id string</a>
<b>Tree</b>	<a href="#">domain-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mep-id** *number*

<b>Description</b>	Source Ethernet maintenance association end point
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet eth-cfm source mep-id number</a>
<b>Tree</b>	<a href="#">mep-id</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**s-tag**

<b>Description</b>	Enter the s-tag context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet s-tag</a>
<b>Tree</b>	<a href="#">s-tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discard-eligible** *boolean*

<b>Description</b>	Enable marking of the DEI bit in the VLAN header
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet s-tag discard-eligible boolean</a>
<b>Tree</b>	<a href="#">discard-eligible</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dot1p *number*

**Description** PCP of Ethernet frames for service stream

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number frame-payload ethernet s-tag dot1p number](#)

**Tree** [dot1p](#)

**Range** 0 to 7

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface *string*

**Description** The interface name

This can be configured in one of two forms. Fully qualified reference to an interface subinterface, example ethernet-1/1.1, or symbolic alias, example interface-1. When the fully qualified name is specified the 'interface-ref' should not be configured. When the symbolic alias is specified the 'interface-ref' must be configured.

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number interface string](#)

**Tree** [interface](#)

**String Length** 1 to 255

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-ref

**Description** Reference to interface subinterface when symbolic alias is configured under the interface list

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number interface-ref](#)

**Tree** [interface-ref](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface *reference*

**Description** Reference to a base interface

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number interface-ref interface reference](#)

**Tree** [interface](#)

**Reference** [interface name string](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *reference*

**Description** Reference to the associated subinterface in network-instance

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number interface-ref subinterface reference](#)

**Tree** [subinterface](#)

**Reference** [interface name string subinterface index number](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### loss-threshold (*decimal-number* | *keyword*)

**Description** Indicates the value of /test-oam/service-activation-testhead/acceptance-criteria-template/loss-threshold when the test run started

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number loss-threshold \(decimal-number | keyword\)](#)

**Tree** [loss-threshold](#)

<b>Range</b>	0.0000 to 100.0000
<b>Default</b>	0.0000
<b>Options</b>	• none
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **loss-threshold-policing** (*decimal-number* | *keyword*)

<b>Description</b>	Indicates the value of /test-oam/service-activation-testhead/acceptance-criteria-template/loss-threshold-policing when the test run started
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number loss-threshold-policing (decimal-number   keyword)</a>
<b>Tree</b>	<a href="#">loss-threshold-policing</a>
<b>Range</b>	0.0000 to 100.0000
<b>Default</b>	0.0000
<b>Options</b>	• none
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **m-factor** *number*

<b>Description</b>	Indicates the value of /test-oam/service-activation-testhead/acceptance-criteria-template/m-factor when the test run started
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number m-factor number</a>
<b>Tree</b>	<a href="#">m-factor</a>
<b>Range</b>	0 to 4000000000
<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** *reference*

<b>Description</b>	Indicates the router which hosts the Eth-CFM MEP, Domain, and Association configured for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Indicates the operational state of the service stream run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• running</li> <li>• stopped-by-user</li> <li>• passed</li> <li>• failed</li> <li>• stopped-by-fault</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pir-threshold** *number*

<b>Description</b>	Indicates the value of <code>/test-oam/service-activation-testhead/acceptance-criteria-template/pir-threshold</code> when the test run started
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream</a> <i>stream-id</i> <i>number</i> <a href="#">pir-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">pir-threshold</a>
<b>Range</b>	0 to 400000000

<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rate-cir number**

<b>Description</b>	CIR packet transmit rate for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number rate-cir number</a>
<b>Tree</b>	<a href="#">rate-cir</a>
<b>Range</b>	0 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rate-pir number**

<b>Description</b>	PIR packet transmit rate for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number rate-pir number</a>
<b>Tree</b>	<a href="#">rate-pir</a>
<b>Range</b>	0 to 400000000
<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-stream-completion-notification boolean**

<b>Description</b>	Enable SNMP trap generation upon test completion
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number service-stream-completion-notification boolean</a>
<b>Tree</b>	<a href="#">service-stream-completion-notification</a>
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### size-a number

**Description** Size-a

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-a number](#)

**Tree** [size-a](#)

**Range** 64 to 9212

**Units** bytes

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### size-b number

**Description** Size-b

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-b number](#)

**Tree** [size-b](#)

**Range** 64 to 9212

**Units** bytes

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### size-c number

**Description** Size-c

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-c number](#)

**Tree** [size-c](#)

**Range** 64 to 9212

**Units** bytes

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-d number**

<b>Description</b>	Size-d
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-d number</a>
<b>Tree</b>	<a href="#">size-d</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-e number**

<b>Description</b>	Size-e
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-e number</a>
<b>Tree</b>	<a href="#">size-e</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-f number**

<b>Description</b>	Size-f
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-f number</a>
<b>Tree</b>	<a href="#">size-f</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-g** *number*

<b>Description</b>	Size-g
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-g number</a>
<b>Tree</b>	<a href="#">size-g</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-h** *number*

<b>Description</b>	Size-h
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-h number</a>
<b>Tree</b>	<a href="#">size-h</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**size-u** *number*

<b>Description</b>	Size-u
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number size-u number</a>
<b>Tree</b>	<a href="#">size-u</a>
<b>Range</b>	64 to 9212
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-mac-address** *string*

<b>Description</b>	Indicates the source MAC address for the service stream 00:00:00:00:00:00 is returned if a source MAC address is not available
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number service-stream stream-id number source-mac-address string</i>
<b>Tree</b>	<a href="#">source-mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-results** [test-type](#) *keyword*

<b>Description</b>	Enter the test-results list instance
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number service-stream stream-id number test-results test-type keyword</i>
<b>Tree</b>	<a href="#">test-results</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-type** *keyword*

<b>Description</b>	The test type to be read
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number service-stream stream-id number test-results test-type keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• cir</li> <li>• cir-pir</li> <li>• policing</li> <li>• performance</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-avg** *number*

<b>Description</b>	Indicates the average delay measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-avg</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-avg</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-max** *number*

<b>Description</b>	Indicates the maximum delay measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-max</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-max</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-min** *number*

<b>Description</b>	Indicates the minimum delay measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-min</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-min</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-var-avg** *number*

<b>Description</b>	Indicates the average delay variation measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-var-avg</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-var-avg</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-var-max** *number*

<b>Description</b>	Indicates the maximum delay variation measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-var-max</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-var-max</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-delay-var-min** *number*

<b>Description</b>	Indicates the minimum delay variation measured for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-delay-var-min</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-delay-var-min</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-frame-loss-ratio** *decimal-number*

<b>Description</b>	Indicates the measured FLR for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-frame-loss-ratio</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">measured-frame-loss-ratio</a>
<b>Range</b>	0.0000 to 100.0000
<b>Units</b>	percent
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-frame-rx** *number*

<b>Description</b>	Indicates the number of frames received during the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-frame-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-frame-rx</a>
<b>Default</b>	0
<b>Units</b>	frames
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-frame-tx** *number*

<b>Description</b>	Indicates the number of frames transmitted during the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run</a> <i>number</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-frame-tx</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-frame-tx</a>
<b>Default</b>	0
<b>Units</b>	frames
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**measured-throughput** *number*

<b>Description</b>	Indicates the measured throughput for the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">measured-throughput</a> <i>number</i>
<b>Tree</b>	<a href="#">measured-throughput</a>
<b>Units</b>	kilobps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	Indicates the operational state of the test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• running</li> <li>• stopped-by-user</li> <li>• passed</li> <li>• failed</li> <li>• stopped-by-fault</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-status-delay** *keyword*

<b>Description</b>	Indicates the test run's operational status, with respect to the delay acceptance criteria
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string</i> <a href="#">test-run number service-stream stream-id</a> <i>number</i> <a href="#">test-results test-type</a> <i>keyword</i> <a href="#">oper-status-delay</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-status-delay</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> </ul>



	<ul style="list-style-type: none"> <li>• pass</li> <li>• fail</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-status-delay-var** *keyword*

<b>Description</b>	Indicates the test run's operational status, with respect to the delay variation acceptance criteria
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-results test-type keyword oper-status-delay-var keyword</a>
<b>Tree</b>	<a href="#">oper-status-delay-var</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• pass</li> <li>• fail</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-status-frame-loss-ratio** *keyword*

<b>Description</b>	Indicates the test run's operational status, with respect to the FLR acceptance criteria
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-results test-type keyword oper-status-frame-loss-ratio keyword</a>
<b>Tree</b>	<a href="#">oper-status-frame-loss-ratio</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown</li> <li>• pass</li> <li>• fail</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-status-throughput** *keyword*

<b>Description</b>	Indicates the test run's operational status, with respect to the throughput acceptance criteria
<b>Context</b>	<a href="#">oam</a> <a href="#">service-activation-testhead</a> <a href="#">results</a> <a href="#">statistics</a> <a href="#">service-test</a> <a href="#">test-name</a> <a href="#">string</a> <a href="#">test-run</a> <a href="#">number</a> <a href="#">service-stream</a> <a href="#">stream-id</a> <a href="#">number</a> <a href="#">test-results</a> <a href="#">test-type</a> <a href="#">keyword</a> <a href="#">oper-status-throughput</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">oper-status-throughput</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unknown</li> <li>pass</li> <li>fail</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-end** (*date-and-time* | *keyword*)

<b>Description</b>	Indicates the end time (in UTC) of the test run
<b>Context</b>	<a href="#">oam</a> <a href="#">service-activation-testhead</a> <a href="#">results</a> <a href="#">statistics</a> <a href="#">service-test</a> <a href="#">test-name</a> <a href="#">string</a> <a href="#">test-run</a> <a href="#">number</a> <a href="#">service-stream</a> <a href="#">stream-id</a> <a href="#">number</a> <a href="#">test-results</a> <a href="#">test-type</a> <a href="#">keyword</a> <a href="#">time-end</a> ( <i>date-and-time</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">time-end</a>
<b>String Length</b>	20 to 32
<b>Options</b>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-left** *number*

<b>Description</b>	Indicates the execution time remaining for the test run
<b>Context</b>	<a href="#">oam</a> <a href="#">service-activation-testhead</a> <a href="#">results</a> <a href="#">statistics</a> <a href="#">service-test</a> <a href="#">test-name</a> <a href="#">string</a> <a href="#">test-run</a> <a href="#">number</a> <a href="#">service-stream</a> <a href="#">stream-id</a> <a href="#">number</a> <a href="#">test-results</a> <a href="#">test-type</a> <a href="#">keyword</a> <a href="#">time-left</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">time-left</a>
<b>Units</b>	seconds
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-start** (*date-and-time* | *keyword*)

**Description** Indicates the start time (in UTC) of the test run

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-results test-type keyword time-start](#) (*date-and-time* | *keyword*)

**Tree** [time-start](#)

**String Length** 20 to 32

**Options**

- not-started

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-types**

**Description** Enter the test-types context

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-types](#)

**Tree** [test-types](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cir** *boolean*

**Description** CIR test for the service stream

**Context** [oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-types cir boolean](#)

**Tree** [cir](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir-pir** *boolean*

<b>Description</b>	CIR-PIR test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-types cir-pir boolean</a>
<b>Tree</b>	<a href="#">cir-pir</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**performance** *boolean*

<b>Description</b>	Performance test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-types performance boolean</a>
<b>Tree</b>	<a href="#">performance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policing** *boolean*

<b>Description</b>	Policing test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-stream stream-id number test-types policing boolean</a>
<b>Tree</b>	<a href="#">policing</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-test-completion-notification** *boolean*

<b>Description</b>	Enable SNMP trap generation upon test completion
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number service-test-completion-notification boolean</a>
<b>Tree</b>	<a href="#">service-test-completion-notification</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stream-run-type** *keyword*

<b>Description</b>	Service stream run order
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number stream-run-type keyword</i>
<b>Tree</b>	<a href="#">stream-run-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• sequential</li> <li>• parallel</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-duration**

<b>Description</b>	Enter the test-duration context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number test-duration</i>
<b>Tree</b>	<a href="#">test-duration</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cir**

<b>Description</b>	Enter the cir context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name</a> <i>string test-run number test-duration cir</i>
<b>Tree</b>	<a href="#">cir</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minutes-seconds** *string*

<b>Description</b>	Duration of the service test CIR tests
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration cir minutes-seconds string</a>
<b>Tree</b>	<a href="#">minutes-seconds</a>
<b>String Length</b>	5
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir-pir**

<b>Description</b>	Enter the cir-pir context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration cir-pir</a>
<b>Tree</b>	<a href="#">cir-pir</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minutes-seconds** *string*

<b>Description</b>	Duration of the service test CIR-PIR tests
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration cir-pir minutes-seconds string</a>
<b>Tree</b>	<a href="#">minutes-seconds</a>
<b>String Length</b>	5
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**performance**

<b>Description</b>	Enter the performance context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration performance</a>
<b>Tree</b>	<a href="#">performance</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### hours-minutes-seconds *string*

<b>Description</b>	Duration of performance tests belonging to the test
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration performance hours-minutes-seconds string</a>
<b>Tree</b>	<a href="#">hours-minutes-seconds</a>
<b>String Length</b>	8
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### policing

<b>Description</b>	Enter the policing context
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration policing</a>
<b>Tree</b>	<a href="#">policing</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minutes-seconds *string*

<b>Description</b>	Duration of policing tests belonging to the test
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number test-duration policing minutes-seconds string</a>
<b>Tree</b>	<a href="#">minutes-seconds</a>
<b>String Length</b>	5
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-end** (*date-and-time* | *keyword*)

<b>Description</b>	Indicates the end time (in UTC) of the specified service-test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number time-end</a> ( <i>date-and-time</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">time-end</a>
<b>String Length</b>	20 to 32
<b>Options</b>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-start** (*date-and-time* | *keyword*)

<b>Description</b>	Indicates the start time (in UTC) of the specified service-test run
<b>Context</b>	<a href="#">oam service-activation-testhead results statistics service-test test-name string test-run number time-start</a> ( <i>date-and-time</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">time-start</a>
<b>String Length</b>	20 to 32
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-started</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-test test-name** *string*

<b>Description</b>	Enter the service-test list instance
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string</a>
<b>Tree</b>	<a href="#">service-test</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	500

**test-name** *string*

<b>Description</b>	Service activation test name
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<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administrative state of the service test
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	Text description
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-stream** [stream-id](#) *number*

<b>Description</b>	Enter the service-stream list instance
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream</a> <a href="#">stream-id</a> <i>number</i>
<b>Tree</b>	<a href="#">service-stream</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stream-id** *number*

**Description** Service stream ID

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number](#)

**Range** 1 to 8

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **acceptance-criteria-template** *reference*

**Description** Acceptance criteria association to a service stream

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number acceptance-criteria-template reference](#)

**Tree** [acceptance-criteria-template](#)

**Reference** [oam service-activation-testhead acceptance-criteria-template ac-template-name string](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

**Description** Administrative state of the service stream

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number admin-state keyword](#)

**Tree** [admin-state](#)

**Default** disable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	Text description
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frame-mix**

<b>Description</b>	Enter the frame-mix context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-mix</a>
<b>Tree</b>	<a href="#">frame-mix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frame-size-template** *reference*

<b>Description</b>	Frame size template for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-mix</a> <a href="#">frame-size-template</a> <i>reference</i>
<b>Tree</b>	<a href="#">frame-size-template</a>
<b>Reference</b>	<a href="#">oam service-activation-testhead frame-size-template fs-template-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sequence** *string*

<b>Description</b>	Sequence of frame sizes for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-mix</a> <a href="#">sequence</a> <i>string</i>
<b>Tree</b>	<a href="#">sequence</a>

<b>String Length</b>	1 to 16
<b>Default</b>	a
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### frame-payload

<b>Description</b>	Enter the frame-payload context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload</a>
<b>Tree</b>	<a href="#">frame-payload</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### data-pattern

<b>Description</b>	Enter the data-pattern context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload data-pattern</a>
<b>Tree</b>	<a href="#">data-pattern</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### repeat (*hex-string* | *number*)

<b>Description</b>	Repeated 4-byte pattern to pad each packet sent
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload data-pattern repeat (<i>hex-string</i>   <i>number</i>)</a>
<b>Tree</b>	<a href="#">repeat</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ethernet**

<b>Description</b>	Enter the ethernet context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet</a>
<b>Tree</b>	<a href="#">ethernet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**c-tag**

<b>Description</b>	Enter the c-tag context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet c-tag</a>
<b>Tree</b>	<a href="#">c-tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discard-eligible *boolean***

<b>Description</b>	Enable marking of the DEI bit in the VLAN header
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet c-tag discard-eligible boolean</a>
<b>Tree</b>	<a href="#">discard-eligible</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dot1p *number***

<b>Description</b>	PCP of Ethernet frames for service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet c-tag dot1p number</a>
<b>Tree</b>	<a href="#">dot1p</a>
<b>Range</b>	0 to 7

<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dst-mac** *string*

<b>Description</b>	Destination MAC address of Ethernet frames
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-payload ethernet dst-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">dst-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **eth-cfm**

<b>Description</b>	Enter the eth-cfm context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-payload ethernet eth-cfm</a>
<b>Tree</b>	<a href="#">eth-cfm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source**

<b>Description</b>	Enter the source context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">frame-payload ethernet eth-cfm source</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **association-id** *reference*

<b>Description</b>	The maintenance association identifier specific to the domain identifier
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<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet eth-cfm source association-id reference</a>
<b>Tree</b>	<a href="#">association-id</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### domain-id reference

<b>Description</b>	The maintenance domain identifier
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet eth-cfm source domain-id reference</a>
<b>Tree</b>	<a href="#">domain-id</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mep-id reference

<b>Description</b>	The MEP identifier specific to the domain and association identifier
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet eth-cfm source mep-id reference</a>
<b>Tree</b>	<a href="#">mep-id</a>
<b>Reference</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id reference</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### s-tag

<b>Description</b>	Enter the s-tag context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet s-tag</a>
<b>Tree</b>	<a href="#">s-tag</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discard-eligible *boolean*

<b>Description</b>	Enable marking of the DEI bit in the VLAN header
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet s-tag discard-eligible boolean</a>
<b>Tree</b>	<a href="#">discard-eligible</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dot1p *number*

<b>Description</b>	PCP of Ethernet frames for service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number frame-payload ethernet s-tag dot1p number</a>
<b>Tree</b>	<a href="#">dot1p</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rate-cir *number*

<b>Description</b>	CIR packet transmit rate for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string service-stream stream-id number rate-cir number</a>
<b>Tree</b>	<a href="#">rate-cir</a>
<b>Range</b>	0 to 400000000
<b>Default</b>	0
<b>Units</b>	kilobps
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rate-pir *number*

**Description** PIR packet transmit rate for the service stream

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number rate-pir number](#)

**Tree** [rate-pir](#)

**Range** 0 to 4000000000

**Default** 0

**Units** kilobps

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### service-stream-completion-notification *boolean*

**Description** Enable SNMP trap generation upon test completion

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number service-stream-completion-notification boolean](#)

**Tree** [service-stream-completion-notification](#)

**Default** false

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-types

**Description** Enter the test-types context

**Context** [oam service-activation-testhead service-test test-name string service-stream stream-id number test-types](#)

**Tree** [test-types](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir** *boolean*

<b>Description</b>	CIR test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-types cir</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cir</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir-pir** *boolean*

<b>Description</b>	CIR-PIR test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-types cir-pir</a> <i>boolean</i>
<b>Tree</b>	<a href="#">cir-pir</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**performance** *boolean*

<b>Description</b>	Performance test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-types performance</a> <i>boolean</i>
<b>Tree</b>	<a href="#">performance</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policing** *boolean*

<b>Description</b>	Policing test for the service stream
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-stream stream-id</a> <i>number</i> <a href="#">test-types policing</a> <i>boolean</i>

<b>Tree</b>	<a href="#">policing</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **service-test-completion-notification** *boolean*

<b>Description</b>	Enable SNMP trap generation upon test completion
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">service-test-completion-notification</a> <i>boolean</i>
<b>Tree</b>	<a href="#">service-test-completion-notification</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **stream-run-type** *keyword*

<b>Description</b>	Service stream run order
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">stream-run-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">stream-run-type</a>
<b>Default</b>	parallel
<b>Options</b>	<ul style="list-style-type: none"> <li>• sequential</li> <li>• parallel</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-duration**

<b>Description</b>	Enter the test-duration context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">test-duration</a>
<b>Tree</b>	<a href="#">test-duration</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## cir

**Description** Enter the cir context

**Context** [oam service-activation-testhead service-test test-name string test-duration cir](#)

**Tree** [cir](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## minutes-seconds *string*

**Description** Duration of the service test CIR tests

**Context** [oam service-activation-testhead service-test test-name string test-duration cir minutes-seconds string](#)

**Tree** [minutes-seconds](#)

**String Length** 5

**Default** 05:00

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## cir-pir

**Description** Enter the cir-pir context

**Context** [oam service-activation-testhead service-test test-name string test-duration cir-pir](#)

**Tree** [cir-pir](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## minutes-seconds *string*

**Description** Duration of the service test CIR-PIR tests

<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">test-duration cir-pir minutes-seconds</a> <i>string</i>
<b>Tree</b>	<a href="#">minutes-seconds</a>
<b>String Length</b>	5
<b>Default</b>	10:00
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## performance

<b>Description</b>	Enter the performance context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">test-duration performance</a>
<b>Tree</b>	<a href="#">performance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hours-minutes-seconds *string*

<b>Description</b>	Duration of performance tests belonging to the test
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">test-duration performance hours-minutes-seconds</a> <i>string</i>
<b>Tree</b>	<a href="#">hours-minutes-seconds</a>
<b>String Length</b>	8
<b>Default</b>	00:15:00
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policing

<b>Description</b>	Enter the policing context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <a href="#">test-duration policing</a>
<b>Tree</b>	<a href="#">policing</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minutes-seconds *string*

**Description** Duration of policing tests belonging to the test

**Context** [oam service-activation-testhead service-test test-name string test-duration policing minutes-seconds string](#)

**Tree** [minutes-seconds](#)

**String Length** 5

**Default** 10:00

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### stamp

**Description** Enable the stamp context

**Context** [oam stamp](#)

**Tree** [stamp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-reflector

**Description** STAMP Session-Reflector configuration and state

**Context** [oam stamp session-reflector](#)

**Tree** [session-reflector](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### inactivity-timer *number*

**Description** STAMP test session timeout on inactivity

The amount of time (ref-wait) a test session must be inactive, no packets arriving, before the test session is removed from the Session-Reflector stateful table.

<b>Context</b>	<a href="#">oam stamp session-reflector inactivity-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">inactivity-timer</a>
<b>Range</b>	1 to 604800
<b>Default</b>	900
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **network-instance** [name](#) *reference*

<b>Description</b>	The list of network instances configured for STAMP Session-Reflector function
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *reference*

<b>Description</b>	The name of the network instances to which the Session-Reflector state and configuration applies
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	This attribute specifies whether the STAMP Session-Reflector is enabled or disabled
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <b>admin-state</b> <i>keyword</i>

<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	A string describing the STAMP Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-prefix [ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The list of IP source addresses or ranges allowed to send STAMP test packets to Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">ip-prefix ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Tree</b>	<a href="#">ip-prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The IP address or range allowed to send STAMP test packets to the Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">ip-prefix ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

**Description** Enter the oper-state context

**Context** [oam stamp session-reflector network-instance name](#) *reference* [oper-state keyword](#)

**Tree** [oper-state](#)

**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## malformed-packet *number*

<b>Description</b>	Session-Reflector was able to identify STAMP test packet but the packet was incorrectly formatted, packet discarded  This counter will be increased if the malformation affects the mapping of the test packet to the test session. This would be the case where the session cannot be identified.
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics malformed-packet number</a>
<b>Tree</b>	<a href="#">malformed-packet</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-discards-source-destination-equal *number*

<b>Description</b>	Session-Reflector discarded the received test packet because source IP and destination IP are the same  The test session is never created in the case where source IP and destination IP are the same.
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<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics packet-discards-source-destination-equal</a> <i>number</i>
<b>Tree</b>	<a href="#">packet-discards-source-destination-equal</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-match-failure** *number*

<b>Description</b>	Session-Sender IP does not have a prefix match configured on the Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics prefix-match-failure</a> <i>number</i>
<b>Tree</b>	<a href="#">prefix-match-failure</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-reflector-udp-port-registration-failure** *number*

<b>Description</b>	The Session-Reflector was unable to allocate the UDP port for this network instance reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics session-reflector-udp-port-registration-failure</a> <i>number</i>
<b>Tree</b>	<a href="#">session-reflector-udp-port-registration-failure</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-frames-received** *number*

<b>Description</b>	STAMP test frames received
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics test-frames-received</a> <i>number</i>
<b>Tree</b>	<a href="#">test-frames-received</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-frames-sent *number*

<b>Description</b>	STAMP test frames transmitted
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics test-frames-sent number</a>
<b>Tree</b>	<a href="#">test-frames-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-sessions *number*

<b>Description</b>	STAMP test session count
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">statistics test-sessions number</a>
<b>Tree</b>	<a href="#">test-sessions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### test-session-statistics [session-sender-ip \(ipv4-address | ipv6-address\)](#) [session-sender-udp number](#) [session-reflector-ip \(ipv4-address | ipv6-address\)](#) [session-reflector-udp number](#) [stamp-session-identifier number](#)

<b>Description</b>	The per test session statistics
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">test-session-statistics session-sender-ip (ipv4-address   ipv6-address)</a> <a href="#">session-sender-udp number</a> <a href="#">session-reflector-ip (ipv4-address   ipv6-address)</a> <a href="#">session-reflector-udp number</a> <a href="#">stamp-session-identifier number</a>
<b>Tree</b>	<a href="#">test-session-statistics</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-sender-ip** (*ipv4-address* | *ipv6-address*)

**Description** The Source IP address of the Session-Sender

**Context** [oam stamp session-reflector network-instance name](#) *reference* [test-session-statistics session-sender-ip](#) (*ipv4-address* | *ipv6-address*) [session-sender-udp number](#) [session-reflector-ip](#) (*ipv4-address* | *ipv6-address*) [session-reflector-udp number](#) [stamp-session-identifier number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-sender-udp** *number*

**Description** The Source UDP address of the Session-Sender

**Context** [oam stamp session-reflector network-instance name](#) *reference* [test-session-statistics session-sender-ip](#) (*ipv4-address* | *ipv6-address*) [session-sender-udp number](#) [session-reflector-ip](#) (*ipv4-address* | *ipv6-address*) [session-reflector-udp number](#) [stamp-session-identifier number](#)

**Range** 0 to 65535

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-reflector-ip** (*ipv4-address* | *ipv6-address*)

**Description** The Destination IP address in the Session-Sender STAMP test packet, an IP on the Session-Reflector

**Context** [oam stamp session-reflector network-instance name](#) *reference* [test-session-statistics session-sender-ip](#) (*ipv4-address* | *ipv6-address*) [session-sender-udp number](#) [session-reflector-ip](#) (*ipv4-address* | *ipv6-address*) [session-reflector-udp number](#) [stamp-session-identifier number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-reflector-udp number**

<b>Description</b>	The Destination UDP address in the Session-Sender STAMP test packet, the listening port on the Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">test-session-statistics session-sender-ip (ipv4-address   ipv6-address)</a> <a href="#">session-sender-udp number</a> <a href="#">session-reflector-ip (ipv4-address   ipv6-address)</a> <a href="#">session-reflector-udp number</a> <a href="#">stamp-session-identifier number</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stamp-session-identifier number**

<b>Description</b>	The SSID in the Session-Sender STAMP test packet
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">test-session-statistics session-sender-ip (ipv4-address   ipv6-address)</a> <a href="#">session-sender-udp number</a> <a href="#">session-reflector-ip (ipv4-address   ipv6-address)</a> <a href="#">session-reflector-udp number</a> <a href="#">stamp-session-identifier number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-ref-wait number**

<b>Description</b>	The current value of the ref wait time for the test session
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name</a> <i>reference</i> <a href="#">test-session-statistics session-sender-ip (ipv4-address   ipv6-address)</a> <a href="#">session-sender-udp number</a> <a href="#">session-reflector-ip (ipv4-address   ipv6-address)</a> <a href="#">session-reflector-udp number</a> <a href="#">stamp-session-identifier number</a> <a href="#">current-ref-wait number</a>
<b>Tree</b>	<a href="#">current-ref-wait</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-sequence-number-received number**

<b>Description</b>	The last sequence number received in the Session-Sender test packet
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<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference test-session-statistics session-sender-ip (ipv4-address   ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address   ipv6-address) session-reflector-udp number stamp-session-identifier number last-sequence-number-received number</a>
<b>Tree</b>	<a href="#">last-sequence-number-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-sequence-number-transmitted** *number*

<b>Description</b>	The last sequence number transmitted in the Session-Reflector test packet
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference test-session-statistics session-sender-ip (ipv4-address   ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address   ipv6-address) session-reflector-udp number stamp-session-identifier number last-sequence-number-transmitted number</a>
<b>Tree</b>	<a href="#">last-sequence-number-transmitted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **malformed-tlv** *number*

<b>Description</b>	<p>Session-Reflector was able to identify STAMP test packet but the packet was incorrectly formatted, packet discarded</p> <p>This counter will be increased if the malformation does not affect the mapping of the test packet to the test session. This would be the case if a TLV is malformed.</p>
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference test-session-statistics session-sender-ip (ipv4-address   ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address   ipv6-address) session-reflector-udp number stamp-session-identifier number malformed-tlv number</a>
<b>Tree</b>	<a href="#">malformed-tlv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-frames-received** *number*

<b>Description</b>	STAMP test frames received
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference test-session-statistics session-sender-ip (ipv4-address   ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address   ipv6-address) session-reflector-udp number stamp-session-identifier number test-frames-received number</a>
<b>Tree</b>	<a href="#">test-frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-frames-sent** *number*

<b>Description</b>	STAMP test frames transmitted
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference test-session-statistics session-sender-ip (ipv4-address   ipv6-address) session-sender-udp number session-reflector-ip (ipv4-address   ipv6-address) session-reflector-udp number stamp-session-identifier number test-frames-sent number</a>
<b>Tree</b>	<a href="#">test-frames-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**udp-port** *number*

<b>Description</b>	The UDP Port listening port of the STAMP Session-Reflector
<b>Context</b>	<a href="#">oam stamp session-reflector network-instance name reference udp-port number</a>
<b>Tree</b>	<a href="#">udp-port</a>
<b>Range</b>	862   64364 to 64373
<b>Default</b>	862
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam stamp session-reflector statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-discards-on-reception *number*

<b>Description</b>	Received STAMP test packets discarded lack of resources or resource contention
<b>Context</b>	<a href="#">oam stamp session-reflector statistics packet-discards-on-reception number</a>
<b>Tree</b>	<a href="#">packet-discards-on-reception</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-discards-on-transmission *number*

<b>Description</b>	Transmitted STAMP test packets discarded due to lack of resources or resource contention
<b>Context</b>	<a href="#">oam stamp session-reflector statistics packet-discards-on-transmission number</a>
<b>Tree</b>	<a href="#">packet-discards-on-transmission</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## reflector-table-entries-full *number*

<b>Description</b>	Session-Reflector no available state table entries to add new test session
<b>Context</b>	<a href="#">oam stamp session-reflector statistics reflector-table-entries-full number</a>
<b>Tree</b>	<a href="#">reflector-table-entries-full</a>

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<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reflectors-configured** *number*

<b>Description</b>	Count of STAMP Session-Reflectors administratively enabled regardless of operational state
<b>Context</b>	<a href="#">oam stamp session-reflector statistics reflectors-configured</a> <i>number</i>
<b>Tree</b>	<a href="#">reflectors-configured</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reflectors-not-operational** *number*

<b>Description</b>	Count of STAMP Session-Reflectors with an administrative state 'enable' and operational state 'down'
<b>Context</b>	<a href="#">oam stamp session-reflector statistics reflectors-not-operational</a> <i>number</i>
<b>Tree</b>	<a href="#">reflectors-not-operational</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reflectors-operational** *number*

<b>Description</b>	Count of STAMP Session-Reflectors with an administrative state 'enable' and operational state 'up'
<b>Context</b>	<a href="#">oam stamp session-reflector statistics reflectors-operational</a> <i>number</i>
<b>Tree</b>	<a href="#">reflectors-operational</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**session-reflector-not-found** *number*

<b>Description</b>	Session-Sender is sending to a destination UDP port that is not part of the Session-Reflector  The Session-Reflector has not allocated the UDP port for this network instance reflector. This counter may increase when the Session-Reflector is deleted and packets for that specific Session-Reflector had been queued for processing. This counter does not increment when there is failure to map UDP port to the STAMP protocol.
<b>Context</b>	<a href="#">oam stamp session-reflector statistics session-reflector-not-found</a> <i>number</i>
<b>Tree</b>	<a href="#">session-reflector-not-found</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-frames-received** *number*

<b>Description</b>	STAMP test frames received
<b>Context</b>	<a href="#">oam stamp session-reflector statistics test-frames-received</a> <i>number</i>
<b>Tree</b>	<a href="#">test-frames-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-frames-sent** *number*

<b>Description</b>	STAMP test frames transmitted
<b>Context</b>	<a href="#">oam stamp session-reflector statistics test-frames-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">test-frames-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-session-count** *number*

<b>Description</b>	STAMP test session count
<b>Context</b>	<a href="#">oam stamp session-reflector statistics test-session-count</a> <i>number</i>
<b>Tree</b>	<a href="#">test-session-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**twamp**

<b>Description</b>	Enable the twamp context
<b>Context</b>	<a href="#">oam twamp</a>
<b>Tree</b>	<a href="#">twamp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**server**

<b>Description</b>	Configuration of the TWAMP Server logical entity
<b>Context</b>	<a href="#">oam twamp server</a>
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** *name reference*

<b>Description</b>	Enter the network-instance list instance
<b>Context</b>	<a href="#">oam twamp server network-instance</a> <i>name reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *reference*

<b>Description</b>	The name of the TWAMP Server network instance
<b>Context</b>	<a href="#">oam twamp server network-instance name reference</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	TWAMP Server administrative state  A value 'enable' administratively starts the Server and Session-Reflector. A value 'disable' administratively stops the Server and Session-Reflector, dropping any active TWAMP-Control channels and terminating all TWAMP-Test sessions.
<b>Context</b>	<a href="#">oam twamp server network-instance name reference admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**client-connection** [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	List of TWAMP Client IP prefixes that can establish TWAMP-Control connections with the Server
<b>Context</b>	<a href="#">oam twamp server network-instance name reference client-connection prefix (ipv4-prefix   ipv6-prefix)</a>
<b>Tree</b>	<a href="#">client-connection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	A TWAMP Client IP prefix the Server will accept TWAMP-Control connections from
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-connections** *number*

<b>Description</b>	The per Control-Client IP prefix maximum number of concurrent TWAMP-Control connections the Server supports
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">maximum-connections</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-connections</a>
<b>Range</b>	1 to 64
<b>Default</b>	32
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-sessions** *number*

<b>Description</b>	The per Control-Client IP prefix maximum number of oncurrent TWAMP-Test sessions the Server supports
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">maximum-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-sessions</a>
<b>Range</b>	1 to 128
<b>Default</b>	32
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control-connections-active *number*

<b>Description</b>	Total number of active TWAMP-Control channels
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics control-connections-active</a> <i>number</i>
<b>Tree</b>	<a href="#">control-connections-active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control-connections-rejected *number*

<b>Description</b>	Total number of rejected TWAMP-Control channels
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics control-connections-rejected</a> <i>number</i>
<b>Tree</b>	<a href="#">control-connections-rejected</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## test-packets-received *number*

<b>Description</b>	Total number of TWAMP-Test packets received relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">test-packets-received</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-packets-transmitted** *number*

<b>Description</b>	Total number of TWAMP-Test packets sent relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-packets-transmitted</a> <i>number</i>
<b>Tree</b>	<a href="#">test-packets-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-sessions-aborted** *number*

<b>Description</b>	Total number of aborted TWAMP_test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-sessions-aborted</a> <i>number</i>
<b>Tree</b>	<a href="#">test-sessions-aborted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-sessions-active** *number*

<b>Description</b>	Total number of active TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-sessions-active</a> <i>number</i>
<b>Tree</b>	<a href="#">test-sessions-active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**test-sessions-completed** *number*

<b>Description</b>	Total number of completed TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-sessions-completed number</a>
<b>Tree</b>	<a href="#">test-sessions-completed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-rejected** *number*

<b>Description</b>	Total number of rejected TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">client-connection prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">statistics test-sessions-rejected number</a>
<b>Tree</b>	<a href="#">test-sessions-rejected</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-connection** [client-ip \(ipv4-address | ipv6-address\)](#) [client-tcp-port number](#) [server-ip \(ipv4-address | ipv6-address\)](#) [server-tcp-port number](#)

<b>Description</b>	List TWAMP-Control (TCP) connections
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip (ipv4-address   ipv6-address)</a> <a href="#">client-tcp-port number</a> <a href="#">server-ip (ipv4-address   ipv6-address)</a> <a href="#">server-tcp-port number</a>
<b>Tree</b>	<a href="#">control-connection</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**client-ip** ([ipv4-address](#) | [ipv6-address](#))

<b>Description</b>	The IP address of the Control-Client used in the TWAMP-Control (TCP) packets belonging to this control connection
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<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip (ipv4-address   ipv6-address)</a> <a href="#">client-tcp-port number</a> <a href="#">server-ip (ipv4-address   ipv6-address)</a> <a href="#">server-tcp-port number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **client-tcp-port number**

<b>Description</b>	The source TCP port number of the Control-Client used in the TWAMP-Control (TCP) packets belonging to this control connection
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip (ipv4-address   ipv6-address)</a> <a href="#">client-tcp-port number</a> <a href="#">server-ip (ipv4-address   ipv6-address)</a> <a href="#">server-tcp-port number</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **server-ip (ipv4-address | ipv6-address)**

<b>Description</b>	The destination IP address in the TWAMP Control message sent by the Control-Client targeting an IP address of the Server
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip (ipv4-address   ipv6-address)</a> <a href="#">client-tcp-port number</a> <a href="#">server-ip (ipv4-address   ipv6-address)</a> <a href="#">server-tcp-port number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **server-tcp-port number**

<b>Description</b>	The destination TCP port the Server listens for TWAMP-Control messages
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip (ipv4-address   ipv6-address)</a> <a href="#">client-tcp-port number</a> <a href="#">server-ip (ipv4-address   ipv6-address)</a> <a href="#">server-tcp-port number</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-packet-dscp** *number*

<b>Description</b>	The DSCP value used in the IP header of the TWAMP-Control (TCP) packets sent by the Server
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">client-tcp-port number</a> <a href="#">server-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">server-tcp-port number</a> <a href="#">control-packet-dscp number</a>
<b>Tree</b>	<a href="#">control-packet-dscp</a>
<b>Range</b>	0 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**selected-mode** *keyword*

<b>Description</b>	The TWAMP Mode chosen in the Mode field of the TWAMP Set-Up-Response message
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-connection client-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">client-tcp-port number</a> <a href="#">server-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">server-tcp-port number</a> <a href="#">selected-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">selected-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unauthenticated No encryption or authentication is applied in TWAMP-Control and TWAMP-Test</li> <li>authenticated Control-Client and Server pass a shared secret for authentication</li> <li>encrypted Additional level of protection using encryption</li> <li>unauth-test-encrypt-control Mixed Security Mode, the TWAMP-Test uses unauthenticated mode and TWAMP-Control uses encrypted mode</li> <li>individual-session-control Individual TWAMP-Test sessions start and stop using individual session identifiers This allows TWAMP-Test sessions using the same control channel to be started individually instead of using the bulk all sessions start.</li> <li>reflect-octets Reflect octets capability</li> <li>symmetrical-size</li> </ul>

Symmetrical size for test packets between Session-Sender and Session-Reflector

**Configurable**

False

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state keyword****Description**

Indicates the Server TWAMP-Control connection state

**Context**

[oam twamp server network-instance name reference control-connection client-ip \(ipv4-address | ipv6-address\) client-tcp-port number server-ip \(ipv4-address | ipv6-address\) server-tcp-port number state keyword](#)

**Tree**[state](#)**Options**

- active

TWAMP-Control connection between the Server and the Control-Client is active

Packets are arriving on the TWAMP-Control channel or there are active TWAMP-Test sessions on the TWAMP-Control channel.

- servwait

TWAMP-Control connection between the Server and the Control-Client is in SERVWAIT

This state is entered when there are no TWAMP-Control messages between the Control-Client and Server and all test sessions on the TWAMP-Control channel have been stopped, and the REFWAIT (timeout following test session stop) has expired.

**Configurable**

False

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics****Description**

Enter the statistics context

**Context**

[oam twamp server network-instance name reference control-connection client-ip \(ipv4-address | ipv6-address\) client-tcp-port number server-ip \(ipv4-address | ipv6-address\) server-tcp-port number statistics](#)

**Tree**[statistics](#)**Configurable**

False

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-packets-received** *number*

<b>Description</b>	Total number of TWAMP-Test packets received relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-packets-received number</a>
<b>Tree</b>	<a href="#">test-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-packets-transmitted** *number*

<b>Description</b>	Total number of TWAMP-Test packets sent relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-packets-transmitted number</a>
<b>Tree</b>	<a href="#">test-packets-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-aborted** *number*

<b>Description</b>	Total number of aborted TWAMP_test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-sessions-aborted number</a>
<b>Tree</b>	<a href="#">test-sessions-aborted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-active** *number*

<b>Description</b>	Total number of active TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-sessions-active number</a>
<b>Tree</b>	<a href="#">test-sessions-active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-completed** *number*

<b>Description</b>	Total number of completed TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-sessions-completed number</a>
<b>Tree</b>	<a href="#">test-sessions-completed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-rejected** *number*

<b>Description</b>	Total number of rejected TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference control-connection client-ip (ipv4-address   ipv6-address) client-tcp-port number server-ip (ipv4-address   ipv6-address) server-tcp-port number statistics test-sessions-rejected number</a>
<b>Tree</b>	<a href="#">test-sessions-rejected</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control-packet-dscp** (*number* | *keyword*)

<b>Description</b>	The DSCP to be placed in the IP header of TWAMP-Control (TCP) packets generated by the Server
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">control-packet-dscp</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">control-packet-dscp</a>
<b>Range</b>	0 to 63
<b>Default</b>	CS7
<b>Options</b>	<ul style="list-style-type: none"><li>• CS0</li><li>• LE</li><li>• CS1</li><li>• AF11</li><li>• AF12</li><li>• AF13</li><li>• CS2</li><li>• AF21</li><li>• AF22</li><li>• AF23</li><li>• CS3</li><li>• AF31</li><li>• AF32</li><li>• AF33</li><li>• CS4</li><li>• AF41</li><li>• AF42</li><li>• AF43</li><li>• CS5</li><li>• EF</li><li>• CS6</li><li>• CS7</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	TWAMP Server common configuration
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**enforce-test-session-start-time** *boolean*

<b>Description</b>	Discard or process TWAMP-Test packets arriving before the negotiated session start time  A Request-TW-Session includes a start-time value for the test session. A value 'true' enforces the server check that will drop the TWAMP-Test packets if the test session start-time is before the Server time of day. In environments where the TWAMP Client and TWAMP Servers are not synchronized the value 'false' can be used to skip this validation check and process TWAMP test packets that arrive before their indicated start time.
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">enforce-test-session-start-time boolean</a>
<b>Tree</b>	<a href="#">enforce-test-session-start-time</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-connections** *number*

<b>Description</b>	The system wide maximum number of concurrent TWAMP-Control connections the Server supports
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">maximum-connections number</a>
<b>Tree</b>	<a href="#">maximum-connections</a>
<b>Range</b>	1 to 64
<b>Default</b>	32
<b>Configurable</b>	True



<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### maximum-sessions *number*

<b>Description</b>	The system wide maximum number of concurrent TWAMP-Test sessions the Server supports
<b>Context</b>	<a href="#">oam twamp server network-instance name reference maximum-sessions number</a>
<b>Tree</b>	<a href="#">maximum-sessions</a>
<b>Range</b>	1 to 128
<b>Default</b>	32
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### modes *keyword*

<b>Description</b>	The list of TWAMP Modes this Server supports
<b>Context</b>	<a href="#">oam twamp server network-instance name reference modes keyword</a>
<b>Tree</b>	<a href="#">modes</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unauthenticated No encryption or authentication is applied in TWAMP-Control and TWAMP-Test</li> <li>• authenticated Control-Client and Server pass a shared secret for authentication</li> <li>• encrypted Additional level of protection using encryption</li> <li>• unauth-test-encrypt-control Mixed Security Mode, the TWAMP-Test uses unauthenticated mode and TWAMP-Control uses encrypted mode</li> <li>• individual-session-control Individual TWAMP-Test sessions start and stop using individual session identifiers This allows TWAMP-Test sessions using the same control channel to be started individually instead of using the bulk all sessions start.</li> <li>• reflect-octets Reflect octets capability</li> </ul>

	<ul style="list-style-type: none"> <li>• symmetrical-size Symmetrical size for test packets between Session-Sender and Session-Reflector</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	The operational state of the TWAMP Server and Session/Reflector
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting</li> </ul>

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **servwait** *number*

**Description**

TWAMP-Control (TCP) session timeout, in seconds

The length of time the Server maintains the TWAMP-Control channel in the absence of any activity for the channel. This state is entered when there is no TWAMP-Control messages between the Control-Client and Server, and all test sessions on the TWAMP-Control channel have been stopped, and the timeout following test session stop (REFWAIT) has expired.

**Context**

[oam twamp server network-instance name](#) *reference* [servwait](#) *number*

**Tree**

[servwait](#)

**Range**

60 to 3600

**Default**

900

**Units**

seconds

**Configurable**

True

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-reflector**

**Description**

Configuration and state for the TWAMP Session-Reflector

**Context**

[oam twamp server network-instance name](#) *reference* [session-reflector](#)

**Tree**

[session-reflector](#)

**Configurable**

False

**Platforms**

7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-session** *sender-ip (ipv4-address | ipv6-address) sender-udp-port number reflector-ip (ipv4-address | ipv6-address) reflector-udp-port number*

<b>Description</b>	TWAMP Session-Reflector test sessions.
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number reflector-ip (ipv4-address   ipv6-address) reflector-udp-port number</a>
<b>Tree</b>	<a href="#">test-session</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sender-ip** *(ipv4-address | ipv6-address)*

<b>Description</b>	The IP address of the TWAMP Session-Sender for the TWAMP test packets belonging to this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number reflector-ip (ipv4-address   ipv6-address) reflector-udp-port number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sender-udp-port** *number*

<b>Description</b>	The source UDP port used by the TWAMP Session-Sender for the TWAMP test packets belonging to this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number reflector-ip (ipv4-address   ipv6-address) reflector-udp-port number</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reflector-ip** *(ipv4-address | ipv6-address)*

<b>Description</b>	The IP address of the TWAMP Session-Reflector, the destination IP address used in the TWAMP test packets belonging to this test
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<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">sender-udp-port number</a> <a href="#">reflector-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">reflector-udp-port number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reflector-udp-port *number*

<b>Description</b>	The UDP port number the TWAMP Session-Reflector listens on for TWAMP test packets belonging to this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">sender-udp-port number</a> <a href="#">reflector-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">reflector-udp-port number</a>
<b>Range</b>	862   49152 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-sequence-number-received *number*

<b>Description</b>	The last sequence number in the TWAMP-Test packet sent by the Session-Sender to the Session-Reflector for this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">sender-udp-port number</a> <a href="#">reflector-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">reflector-udp-port number</a> <a href="#">last-sequence-number-received number</a>
<b>Tree</b>	<a href="#">last-sequence-number-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-sequence-number-transmitted *number*

<b>Description</b>	The last sequence number in the TWAMP-Test packet sent by the Session-Reflector to the Session-Sender for this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">sender-udp-port number</a> <a href="#">reflector-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">reflector-udp-port number</a> <a href="#">last-sequence-number-transmitted number</a>
<b>Tree</b>	<a href="#">last-sequence-number-transmitted</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-connection-client-ip (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address of the Control-Client used in the TWAMP-Control (TCP) packets belonging to this control connection which negotiated the test session
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) sender-udp-port number reflector-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) reflector-udp-port number parent-connection-client-ip (<i>ipv4-address</i>   <i>ipv6-address</i>)</a>
<b>Tree</b>	<a href="#">parent-connection-client-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-connection-client-tcp-port *number*

<b>Description</b>	The TCP port of the Control-Client used in the TWAMP-Control (TCP) packets belonging to this control connection which negotiated the test session
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) sender-udp-port number reflector-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) reflector-udp-port number parent-connection-client-tcp-port <i>number</i></a>
<b>Tree</b>	<a href="#">parent-connection-client-tcp-port</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-connection-server-ip (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The destination IP address in the TWAMP Control message sent by the Control-Client targeting the Server which negotiated this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) sender-udp-port number reflector-ip (<i>ipv4-address</i>   <i>ipv6-address</i>) reflector-udp-port number parent-connection-server-ip (<i>ipv4-address</i>   <i>ipv6-address</i>)</a>

<b>Tree</b>	<a href="#">parent-connection-server-ip</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **parent-connection-server-tcp-port** *number*

<b>Description</b>	The destination TCP Port (862) in the TWAMP Control message sent by the Control-Client targeting the server which negotiated this test session
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">sender-udp-port</a> <i>number</i> <a href="#">reflector-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">reflector-udp-port</a> <i>number</i> <a href="#">parent-connection-server-tcp-port</a> <i>number</i>
<b>Tree</b>	<a href="#">parent-connection-server-tcp-port</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">sender-udp-port</a> <i>number</i> <a href="#">reflector-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">reflector-udp-port</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-packets-received** *number*

<b>Description</b>	Total number of TWAMP-Test packets received relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">session-reflector test-session sender-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">sender-udp-port</a> <i>number</i> <a href="#">reflector-ip</a> ( <i>ipv4-address   ipv6-address</i> ) <a href="#">reflector-udp-port</a> <i>number</i> <a href="#">statistics test-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">test-packets-received</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-packets-transmitted** *number*

<b>Description</b>	Total number of TWAMP-Test packets sent relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number reflector-ip (ipv4-address   ipv6-address) reflector-udp-port number statistics test-packets-transmitted number</a>
<b>Tree</b>	<a href="#">test-packets-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-packet-dscp** *number*

<b>Description</b>	The DSCP value present in the IP header of TWAMP-Test packets belonging to this session
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number reflector-ip (ipv4-address   ipv6-address) reflector-udp-port number test-packet-dscp number</a>
<b>Tree</b>	<a href="#">test-packet-dscp</a>
<b>Range</b>	0 to 63
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-session-id** *string*

<b>Description</b>	A TWAMP sever auto-allocated identifier for this TWAMP-Test session that is unique to the local Server  This value is communicated to the Control-Client requesting the test session using the SID field of the Accept-Session message.
<b>Context</b>	<a href="#">oam twamp server network-instance name reference session-reflector test-session sender-ip (ipv4-address   ipv6-address) sender-udp-port number</a>



	<a href="#">reflector-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">reflector-udp-port</a> <i>number</i> <a href="#">test-session-id</a> <i>string</i>
<b>Tree</b>	<a href="#">test-session-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control-connections-active *number*

<b>Description</b>	Total number of active TWAMP-Control channels
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics control-connections-active</a> <i>number</i>
<b>Tree</b>	<a href="#">control-connections-active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control-connections-rejected *number*

<b>Description</b>	Total number of rejected TWAMP-Control channels
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics control-connections-rejected</a> <i>number</i>
<b>Tree</b>	<a href="#">control-connections-rejected</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-packets-received** *number*

<b>Description</b>	Total number of TWAMP-Test packets received relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics test-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">test-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-packets-transmitted** *number*

<b>Description</b>	Total number of TWAMP-Test packets sent relevant to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics test-packets-transmitted</a> <i>number</i>
<b>Tree</b>	<a href="#">test-packets-transmitted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-aborted** *number*

<b>Description</b>	Total number of aborted TWAMP_test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics test-sessions-aborted</a> <i>number</i>
<b>Tree</b>	<a href="#">test-sessions-aborted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**test-sessions-active** *number*

<b>Description</b>	Total number of active TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>reference</i> <a href="#">statistics test-sessions-active</a> <i>number</i>

<b>Tree</b>	<a href="#">test-sessions-active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-sessions-completed** *number*

<b>Description</b>	Total number of completed TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference statistics test-sessions-completed</a> <i>number</i>
<b>Tree</b>	<a href="#">test-sessions-completed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **test-sessions-rejected** *number*

<b>Description</b>	Total number of rejected TWAMP-Test sessions relative to the context
<b>Context</b>	<a href="#">oam twamp server network-instance name reference statistics test-sessions-rejected</a> <i>number</i>
<b>Tree</b>	<a href="#">test-sessions-rejected</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">oam twamp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dropped-connection-states

<b>Description</b>	The state of the TWAMP-Control channel when the failure occurred
<b>Context</b>	<a href="#">oam twamp statistics dropped-connection-states</a>
<b>Tree</b>	<a href="#">dropped-connection-states</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## active number

<b>Description</b>	Count of TWAMP-Control connection failures in test active state
<b>Context</b>	<a href="#">oam twamp statistics dropped-connection-states active number</a>
<b>Tree</b>	<a href="#">active</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## idle number

<b>Description</b>	Count of TWAMP-Control connection failures in idle state
<b>Context</b>	<a href="#">oam twamp statistics dropped-connection-states idle number</a>
<b>Tree</b>	<a href="#">idle</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## process-started number

<b>Description</b>	Count of TWAMP-Control connection failures in process-session-start state
<b>Context</b>	<a href="#">oam twamp statistics dropped-connection-states process-started number</a>
<b>Tree</b>	<a href="#">process-started</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **process-stop** *number*

**Description** Count of TWAMP-Control connection failures in process-session-stop state

**Context** [oam twamp statistics dropped-connection-states process-stop](#) *number*

**Tree** [process-stop](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **process-tw-session** *number*

**Description** Count of TWAMP-Control connection failures in process-session-request state

**Context** [oam twamp statistics dropped-connection-states process-tw-session](#) *number*

**Tree** [process-tw-session](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **setup-wait** *number*

**Description** Count of TWAMP-Control connection failures in set-up-wait state

**Context** [oam twamp statistics dropped-connection-states setup-wait](#) *number*

**Tree** [setup-wait](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **started** *number*

**Description** Count of TWAMP-Control connection failures in server-started state

<b>Context</b>	<a href="#">oam twamp statistics dropped-connection-states started</a> <i>number</i>
<b>Tree</b>	<a href="#">started</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-connections

<b>Description</b>	TWAMP-Control (TCP) dropped or closed connections
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections</a>
<b>Tree</b>	<a href="#">dropped-connections</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### connection-timeout *number*

<b>Description</b>	TCP connection timeout
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections connection-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">connection-timeout</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### control-command-not-valid *number*

<b>Description</b>	TCP connection failure because invalid TWAMP-Control command received from Control-Client
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections control-command-not-valid</a> <i>number</i>
<b>Tree</b>	<a href="#">control-command-not-valid</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**incorrect-stop-session-count** *number*

<b>Description</b>	TCP connection failure because invalid session count was received in the Stop-Sessions message from the Control-Client
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections incorrect-stop-session-count number</a>
<b>Tree</b>	<a href="#">incorrect-stop-session-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**invalid-invalid-hmac** *number*

<b>Description</b>	Invalid Hash-based Message Authentication Code (HMAC)
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections invalid-invalid-hmac number</a>
<b>Tree</b>	<a href="#">invalid-invalid-hmac</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-global-limit-exceed** *number*

<b>Description</b>	TCP connection failures because global connection limit exceeds
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections maximum-global-limit-exceed number</a>
<b>Tree</b>	<a href="#">maximum-global-limit-exceed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-prefix-limit-exceed** *number*

<b>Description</b>	TCP connection failures because per prefix connection limit exceeds
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections maximum-prefix-limit-exceed number</a>

<b>Tree</b>	<a href="#">maximum-prefix-limit-exceed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **memory-allocation-error** *number*

<b>Description</b>	TCP connection failure because of memory allocation error
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections memory-allocation-error</a> <i>number</i>
<b>Tree</b>	<a href="#">memory-allocation-error</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **message-send-error** *number*

<b>Description</b>	TCP connection failure because of server message send error (Greeting, Start or Accept)
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections message-send-error</a> <i>number</i>
<b>Tree</b>	<a href="#">message-send-error</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **no-client-prefix-match** *number*

<b>Description</b>	TCP connection failures because no prefix match for Client IP
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections no-client-prefix-match</a> <i>number</i>
<b>Tree</b>	<a href="#">no-client-prefix-match</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**no-internal-resource** *number*

<b>Description</b>	TCP connection failures because internal resource unavailable
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections no-internal-resource</a> <i>number</i>
<b>Tree</b>	<a href="#">no-internal-resource</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**non-zero-sid-in-client-control-message** *number*

<b>Description</b>	TCP connection failure because of invalid non-zero SID received from Control-Client
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections non-zero-sid-in-client-control-message</a> <i>number</i>
<b>Tree</b>	<a href="#">non-zero-sid-in-client-control-message</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tcp-connection-closed** *number*

<b>Description</b>	TCP connection closed
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections tcp-connection-closed</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-connection-closed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tcp-connection-fatal-error** *number*

<b>Description</b>	TCP connection errors
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections tcp-connection-fatal-error</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-connection-fatal-error</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tcp-unexpected-event** *number*

<b>Description</b>	TCP connection failures because of unexpected protocol events
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections tcp-unexpected-event</a> <i>number</i>
<b>Tree</b>	<a href="#">tcp-unexpected-event</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unspecified-mode** *number*

<b>Description</b>	TCP connection failures because unspecified TWAMP mode received from Control-Client
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections unspecified-mode</a> <i>number</i>
<b>Tree</b>	<a href="#">unspecified-mode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unsupported-mode** *number*

<b>Description</b>	TCP connection failures because unsupported TWAMP mode requested by Control-Client
<b>Context</b>	<a href="#">oam twamp statistics dropped-connections unsupported-mode</a> <i>number</i>
<b>Tree</b>	<a href="#">unsupported-mode</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dropped-test-packet**

<b>Description</b>	TWAMP-Test packet drop stats
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet</a>
<b>Tree</b>	<a href="#">dropped-test-packet</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**arrived-before-start-time *number***

<b>Description</b>	<p>Test packets dropped because they arrived before start time</p> <p>The TWAMP-Test packets arrived on the Session-Reflector before the indicated start-time in the Request-TW-Session. This is likely caused by a difference in Time of Day (ToD) clocks used for timestaming the TWAMP-Test packet. This may occur when the Server/Session-Reflector clock is ahead of the ToD clock of the Control-Client/Session-Sender.</p>
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet arrived-before-start-time <i>number</i></a>
<b>Tree</b>	<a href="#">arrived-before-start-time</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**incorrect-packet-size *number***

<b>Description</b>	Test packets dropped because of unexpected packet size
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet incorrect-packet-size <i>number</i></a>
<b>Tree</b>	<a href="#">incorrect-packet-size</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**incorrect-source-address *number***

<b>Description</b>	Test packets dropped because incorrect source address
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet incorrect-source-address <i>number</i></a>

<b>Tree</b>	<a href="#">incorrect-source-address</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **invalid-error-estimate** *number*

<b>Description</b>	Test packets dropped because invalid TWAMP-Test error estimate received from the Session-Sender
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet invalid-error-estimate</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-error-estimate</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **invalid-server-octets** *number*

<b>Description</b>	Test packets dropped because of invalid server octets
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet invalid-server-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-server-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **invalid-symmetric-mbz** *number*

<b>Description</b>	Test packets dropped because of invalid symmetric padding Must Be Zero (MBZ)
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet invalid-symmetric-mbz</a> <i>number</i>
<b>Tree</b>	<a href="#">invalid-symmetric-mbz</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**no-start-sessions** *number*

<b>Description</b>	Test packets dropped because they arrived before Client-Control start-sessions message for the session
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet no-start-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">no-start-sessions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reply-error** *number*

<b>Description</b>	Test reply send errors.
<b>Context</b>	<a href="#">oam twamp statistics dropped-test-packet reply-error</a> <i>number</i>
<b>Tree</b>	<a href="#">reply-error</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rejected-session**

<b>Description</b>	Per reason code error statistics for test session rejection
<b>Context</b>	<a href="#">oam twamp statistics rejected-session</a>
<b>Tree</b>	<a href="#">rejected-session</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-type-p** *number*

<b>Description</b>	Sessions rejected because of non-DSCP type-p
<b>Context</b>	<a href="#">oam twamp statistics rejected-session bad-type-p</a> <i>number</i>
<b>Tree</b>	<a href="#">bad-type-p</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **client-source-ip-unreachable** *number*

**Description** Session rejected because Control-Client IP is not reachable

**Context** [oam twamp statistics rejected-session client-source-ip-unreachable](#) *number*

**Tree** [client-source-ip-unreachable](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **duplicate-session** *number*

**Description** Sessions rejected because duplicate session already exists

**Context** [oam twamp statistics rejected-session duplicate-session](#) *number*

**Tree** [duplicate-session](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **invalid-ip-address-version** *number*

**Description** Sessions rejected because of bad IP version

**Context** [oam twamp statistics rejected-session invalid-ip-address-version](#) *number*

**Tree** [invalid-ip-address-version](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-global-session-exceed** *number*

**Description** Sessions rejected because of global session limit exceeds

<b>Context</b>	<a href="#">oam twamp statistics rejected-session maximum-global-session-exceed number</a>
<b>Tree</b>	<a href="#">maximum-global-session-exceed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-prefix-session-exceed number**

<b>Description</b>	Sessions rejected because of prefix session limit exceeds
<b>Context</b>	<a href="#">oam twamp statistics rejected-session maximum-prefix-session-exceed number</a>
<b>Tree</b>	<a href="#">maximum-prefix-session-exceed</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **no-internal-resource number**

<b>Description</b>	Sessions rejected because internal resource is not available
<b>Context</b>	<a href="#">oam twamp statistics rejected-session no-internal-resource number</a>
<b>Tree</b>	<a href="#">no-internal-resource</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **non-local-ip-destination number**

<b>Description</b>	Sessions rejected because destination IP in the TWAMP-Test packet from the Session-Sender was not local to the Session-Reflector
<b>Context</b>	<a href="#">oam twamp statistics rejected-session non-local-ip-destination number</a>
<b>Tree</b>	<a href="#">non-local-ip-destination</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **non-zero-mbz-value** *number*

**Description** Sessions rejected because Must Be Zero (MBZ) values in TWAMP-Test packet were not zero

**Context** [oam twamp statistics rejected-session non-zero-mbz-value](#) *number*

**Tree** [non-zero-mbz-value](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **non-zero-session-sender-sid** *number*

**Description** Sessions rejected because Session-Sender SID is not zero

**Context** [oam twamp statistics rejected-session non-zero-session-sender-sid](#) *number*

**Tree** [non-zero-session-sender-sid](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **padding-too-big** *number*

**Description** Sessions rejected because padding length requested is too large

**Context** [oam twamp statistics rejected-session padding-too-big](#) *number*

**Tree** [padding-too-big](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **refwait-timeout** *number*

**Description** Sessions dropped because Session-Reflector inactivity timer (REFWAIT) elapsed



---

<b>Context</b>	<a href="#">oam twamp statistics rejected-session refwait-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">refwait-timeout</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **timeout-too-large** *number*

<b>Description</b>	Sessions rejected because timeout advertised is larger than reference wait (REFWAIT)
<b>Context</b>	<a href="#">oam twamp statistics rejected-session timeout-too-large</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout-too-large</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **udp-port-in-use** *number*

<b>Description</b>	Sessions rejected because UDP Port is not available
<b>Context</b>	<a href="#">oam twamp statistics rejected-session udp-port-in-use</a> <i>number</i>
<b>Tree</b>	<a href="#">udp-port-in-use</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 8 platform

```

platform
+ chassis
- clei-code string
- failure-reason string
- healthz
  - last-unhealthy string
  - status keyword
  - unhealthy-count number
- hw-mac-address string
+ id number
- last-boot-type string
- last-booted string
- last-booted-reason identityref
- last-change string
- manufactured-date string
- oper-state keyword
- part-number string
+ power
- control
  - peak number
  - required number
  - used number
- fabric
  - peak number
  - required number
  - used number
- fan-tray
  - peak number
  - required number
  - used number
- linecard
  - peak number
  - required number
  - used number
- total
  - capacity number
  - peak number
  - required number
  - used number
- rebooting-at string
- removable boolean
+ secondary-mac-address string
- serial-number string
- slots number
- type string
+ control slot string
- bios
  - manufacturer string
  - software-version string
- bootloader
  - manufacturer string
  - software-version string
- cgroup name string
- cpuacct-statistics
  - system number
  - user number

```

```
- memory-statistics
  - anon number
  - anon-thp number
  - current number
  - current-swap number
  - file number
  - file-dirty number
  - file-writeback number
  - kernel-stack number
  - memory-events
    - high number
    - low number
    - max number
    - oom number
    - oom-kill number
  - slab number
  - sock number
- clei-code string
- cpu index (keyword | number)
  - architecture keyword
  - hardware-interrupt
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - idle
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - iowait
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - nice
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - software-interrupt
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - speed decimal-number
  - system
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - total
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
  - type string
  - user
    - average-1 number
    - average-15 number
    - average-5 number
    - instant number
- disk name string
  - encrypted boolean
```

```

- model-number string
- partition name string
  - encrypted boolean
  - free number
  - mount-point string
  - mount-status keyword
  - percent-used number
  - size number
  - used number
  - uuid string
- serial-number string
- size number
- statistics
  - io-errors number
  - max-erase-count number
  - read-per-second decimal-number
  - transfers-per-second decimal-number
  - utilization number
  - written-per-second decimal-number
- type keyword
- disk-encrypted boolean
- failure-reason string
- forwarding-plane
  - fib-table
    - programming-progress
      - ip-routes
        - entries-remaining-to-add number
        - entries-remaining-to-modify number
        - last-sync-time string
      - next-hop-groups
        - entries-remaining-to-add number
        - entries-remaining-to-modify number
        - last-sync-time string
  - healthz
    - last-unhealthy string
    - status keyword
    - unhealthy-count number
+ interface name identityref
+ admin-state keyword
- oper-state keyword
- last-booted string
- last-booted-reason identityref
- last-change string
- last-switchover-reason
  - details string
  - trigger identityref
- locator-state keyword
- manufactured-date string
- memory
  - free number
  - physical number
  - reserved number
  - utilization number
- oper-state keyword
- part-number string
- power
  - required number
  - used number
- process pid number
- args string
- cpu-utilization number
- memory-usage number
- memory-utilization number
- name string

```

```

-   start-time string
-   rebooting-at string
-   removable boolean
-   role keyword
-   serial-number string
-   software-version string
-   temperature
-     - alarm-status boolean
-     - instant number
-     - margin number
-     - maximum number
-     - maximum-time string
-   type string
+ fabric slot number
+ admin-state keyword
- clei-code string
- failure-reason string
- healthz
-   - last-unhealthy string
-   - status keyword
-   - unhealthy-count number
- last-booted string
- last-booted-reason identityref
- last-change string
- locator-state keyword
- manufactured-date string
- oper-state keyword
- part-number string
- power
-   - required number
-   - used number
- rebooting-at string
- removable boolean
- serial-number string
- temperature
-   - alarm-status boolean
-   - instant number
-   - margin number
-   - maximum number
-   - maximum-time string
- type string
- fan-tray id number
- clei-code string
- failure-reason string
- healthz
-   - last-unhealthy string
-   - status keyword
-   - unhealthy-count number
- last-booted string
- last-booted-reason identityref
- last-change string
- locator-state keyword
- manufactured-date string
- oper-reason keyword
- oper-state keyword
- part-number string
- power
-   - required number
-   - used number
- removable boolean
- serial-number string
- speed number
- speed-rpm number
- type string

```

```

+ linecard slot number
+ admin-state keyword
- bios
  - manufacturer string
  - software-version string
- clei-code string
- failure-reason string
+ forwarding-complex name keyword
- acl
  - resource name identityref
  - free number
  - used number
+ buffer-memory
- dram
  - used number
- free number
- reserved number
- root-pool index number
  - mid-pool index number
    - operational-size number
    - used number
  - operational-size number
  - used number
- sram
  - free number
  - used number
- system-reserved-pool
  - operational-size number
- used number
- control-plane-traffic
  - dropped-aggregate number
  - dropped-bytes-aggregate number
  - queued-aggregate number
  - queued-bytes-aggregate number
- datapath
- asic
  - resource name identityref
  - free-entries number
  - used-entries number
  - used-high-watermark number
  - used-last-high-watermark-time string
  - used-percent number
  - used-upper-threshold-exceeded boolean
- xdp
  - resource name identityref
  - free-entries number
  - used-entries number
  - used-high-watermark number
  - used-last-high-watermark-time string
  - used-percent number
  - used-upper-threshold-exceeded boolean
- drop-counters
  - adverse-aggregate number
  - congestion-aggregate number
  - no-route number
  - packet-processing-aggregate number
+ fabric
  - availability number
  - consumed-capacity number
  - operational-capacity number
  - total-capacity number
  - utilization-egress number
  - utilization-ingress number
- fib-table

```

```

- next-hop-group index number
- backup-active boolean
- backup-next-hop-group reference
- next-hop id number
  - next-hop number
  - oper-state keyword
- oper-state keyword
- programming-progress
  - ip-routes
    - entries-remaining-to-add number
    - entries-remaining-to-modify number
    - last-sync-time string
  - next-hop-groups
    - entries-remaining-to-add number
    - entries-remaining-to-modify number
    - last-sync-time string
- interfaces string
- last-booted string
- last-booted-reason identityref
- last-change string
- mtu
  - resource name identityref
  - free number
  - used number
- oper-state keyword
+ p4rt
  + id number
- part-number string
+ pipeline index (number | keyword)
  - datapath
    - xdp
      - resource name identityref
      - free-entries number
      - used-entries number
      - used-percent number
    - pipeline-counters
      - host-interface-block
        - packet-extraction
          - extracted-octets number
          - extracted-packets number
          - extraction-reason reason identityref
            - extracted-octets number
            - extracted-packets number
      - qos
        - resource name identityref
        - free number
        - used number
        - resource-set-pool index number
        - interface-group-resource-pool index number
        - resource-group index number
          - resource-sets
            - free number
            - used number
          - resource-groups
            - free number
            - used number
      - removable boolean
      - tcam
        - resource name identityref
        - free-dynamic number
        - free-static number
        - programmed number
        - reserved number
  - healthz

```

```

- last-unhealthy string
- status keyword
- unhealthy-count number
- last-booted string
- last-booted-reason identityref
- last-change string
- locator-state keyword
- manufactured-date string
- oper-state keyword
- part-number string
- power
  - required number
  - used number
- rebooting-at string
- removable boolean
- serial-number string
- software-version string
- temperature
  - alarm-status boolean
  - instant number
  - margin number
  - maximum number
  - maximum-time string
- type string
- power-supply id number
- capacity number
- clei-code string
- failure-reason string
- fan
  - speed number
  - speed-rpm number
- feed id number
  - current decimal-number
  - voltage decimal-number
- healthz
  - last-unhealthy string
  - status keyword
  - unhealthy-count number
- input
  - current decimal-number
  - power decimal-number
  - voltage decimal-number
- last-booted string
- last-booted-reason identityref
- last-change string
- manufactured-date string
- oper-reason keyword
- oper-state keyword
- output
  - current decimal-number
  - power decimal-number
  - voltage decimal-number
- part-number string
- removable boolean
- serial-number string
- temperature
  - alarm-status boolean
  - instant number
  - maximum number
  - maximum-time string
- type string
+ redundancy
  - active-module keyword
  - failover-time string

```



```

+ synchronization
- last-synchronization string
+ overlay
- last-synchronization string
- next-synchronization string
+ synchronization-frequency number
- state keyword
+ resource-management
+ tcam
+ unified-forwarding-resources
- allocated-extra-ip-host-entries number
- allocated-extra-mac-entries number
+ alpm keyword
+ ipv6-128bit-lpm-entries number
+ requested-extra-ip-host-entries number
- xdp-restart-required boolean
+ resource-monitoring
+ acl
+ resource name identityref
+ falling-threshold-log number
+ rising-threshold-log number
+ datapath
+ asic
+ resource name identityref
+ upper-threshold-clear number
+ upper-threshold-set number
+ xdp
+ resource name identityref
+ upper-threshold-clear number
+ upper-threshold-set number
+ mtu
+ resource name identityref
+ falling-threshold-log number
+ rising-threshold-log number
+ qos
+ resource name identityref
+ falling-threshold-log number
+ rising-threshold-log number
+ tcam
+ resource name identityref
+ falling-threshold-log number
+ rising-threshold-log number
- trust
- secure-boot
- control slot string
- oper-state keyword
- root-of-trust keyword
- uefi-variables variable string
- contents
- certificate index number
- data binary
- sha1-hash index number
- digest-value binary
- sha256-hash index number
- digest-value binary
- sha256-hash-cert index number
- digest-value binary
- revocation-time string
- uefi-variables-update
- db-update-required boolean
- dbx-update-required boolean
- kek-update-required boolean
- modification-dataset-db-conflict boolean
- modification-dataset-dbx-conflict boolean

```

```
- modification-dataset-digest binary
- modification-dataset-present boolean
- modification-dataset-valid boolean
- pk-update-required boolean
- up-to-date boolean
- tpm
  - control slot string
  - certificates name string
    - data binary
    - nv-index number
  - oper-state keyword
  - tpm20-pcr-bank tpm20-hash-algo string
    - pcr-index number
```

## 8.1 platform Descriptions

### platform

<b>Description</b>	Enclosing container for platform components
<b>Context</b>	<a href="#">platform</a>
<b>Tree</b>	<a href="#">platform</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### chassis

<b>Description</b>	Top-level container for chassis configuration and state
<b>Context</b>	<a href="#">platform chassis</a>
<b>Tree</b>	<a href="#">chassis</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### clei-code *string*

<b>Description</b>	The Common Language Identification Code for this component
<b>Context</b>	<a href="#">platform chassis clei-code string</a>
<b>Tree</b>	<a href="#">clei-code</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### failure-reason *string*

<b>Description</b>	The reason the component transitioned to a failed state Field is empty if the component is not currently in a failure state
<b>Context</b>	<a href="#">platform chassis failure-reason string</a>
<b>Tree</b>	<a href="#">failure-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## healthz

<b>Description</b>	The health of the component  The parameters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.
<b>Context</b>	<a href="#">platform chassis healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-unhealthy *string*

<b>Description</b>	Last unhealthy time  The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.
<b>Context</b>	<a href="#">platform chassis healthz last-unhealthy string</a>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## status *keyword*

<b>Description</b>	Health status  The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform chassis healthz status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified</li> </ul>

Unspecified status

The component's health status has not yet been checked by the system.

- healthy

Healthy status

The component is in a healthy state, and is operating within the expected parameters.

- unhealthy

Unhealthy status

The component is in a unhealthy state, it is not performing the function expected of it.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unhealthy-count** *number*

**Description**

Unhealthy count

The number of times the component has transitioned from the healthy state to any other state.

**Context**

[platform chassis healthz unhealthy-count](#) *number*

**Tree**

[unhealthy-count](#)

**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **hw-mac-address** *string*

**Description**

The chassis MAC address

Read from hardware, or derived from the systems UUID

**Context**

[platform chassis hw-mac-address](#) *string*

**Tree**

[hw-mac-address](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**id number**

<b>Description</b>	A user configured chassis ID This value is not used by the system, but is provided for user convenience.
<b>Context</b>	<a href="#">platform chassis id number</a>
<b>Tree</b>	<a href="#">id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-boot-type string**

<b>Description</b>	The type of boot the chassis initialized from This field indicates what type of reboot occurred, whether it be warm, normal, or otherwise.
<b>Context</b>	<a href="#">platform chassis last-boot-type string</a>
<b>Tree</b>	<a href="#">last-boot-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted string**

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform chassis last-booted string</a>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted-reason identityref**

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform chassis last-booted-reason identityref</a>
<b>Tree</b>	<a href="#">last-booted-reason</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated-reboot A user initiated the reboot directly via a management interface</li> <li>• power-failure The system rebooted the component due to insufficient power</li> <li>• critical-error The system rebooted the component due to an internal critical error</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform chassis last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**manufactured-date** *string*

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform chassis manufactured-date string</a>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform chassis oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> </ul>

- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**part-number *string*****Description**

Part number for this component

**Context**[platform chassis part-number \*string\*](#)**Tree**[part-number](#)**Configurable**

False



**Platforms** Supported on all platforms

## power

**Description** Top-level container for chassis-wide power state

**Context** [platform chassis power](#)

**Tree** [power](#)

**Configurable** True

**Platforms** Supported on all platforms

## control

**Description** Top-level container for power usage of control modules

**Context** [platform chassis power control](#)

**Tree** [control](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## peak *number*

**Description** Peak power used

**Context** [platform chassis power control peak \*number\*](#)

**Tree** [peak](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## required *number*

**Description** Power required to power on all present admin enabled components as part of power management

**Context** [platform chassis power control required \*number\*](#)

**Tree** [required](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used number**

<b>Description</b>	Used power
<b>Context</b>	<a href="#">platform chassis power control used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**fabric**

<b>Description</b>	Top-level container for power usage of fabric modules
<b>Context</b>	<a href="#">platform chassis power fabric</a>
<b>Tree</b>	<a href="#">fabric</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**peak number**

<b>Description</b>	Peak power used
<b>Context</b>	<a href="#">platform chassis power fabric peak number</a>
<b>Tree</b>	<a href="#">peak</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**required number**

<b>Description</b>	Power required to power on all present admin enabled components as part of power management
<b>Context</b>	<a href="#">platform chassis power fabric required number</a>
<b>Tree</b>	<a href="#">required</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used number**

<b>Description</b>	Used power
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<b>Context</b>	<a href="#">platform chassis power fabric used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### fan-tray

<b>Description</b>	Top-level container for power usage of fan-trays
<b>Context</b>	<a href="#">platform chassis power fan-tray</a>
<b>Tree</b>	<a href="#">fan-tray</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### peak number

<b>Description</b>	Peak power used
<b>Context</b>	<a href="#">platform chassis power fan-tray peak number</a>
<b>Tree</b>	<a href="#">peak</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### required number

<b>Description</b>	Power required to power on all present admin enabled components as part of power management
<b>Context</b>	<a href="#">platform chassis power fan-tray required number</a>
<b>Tree</b>	<a href="#">required</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### used number

<b>Description</b>	Used power
<b>Context</b>	<a href="#">platform chassis power fan-tray used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## linecard

**Description** Top-level container for power usage of linecard modules

**Context** [platform chassis power linecard](#)

**Tree** [linecard](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## peak *number*

**Description** Peak power used

**Context** [platform chassis power linecard peak \*number\*](#)

**Tree** [peak](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## required *number*

**Description** Power required to power on all present admin enabled components as part of power management

**Context** [platform chassis power linecard required \*number\*](#)

**Tree** [required](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## used *number*

**Description** Used power

**Context** [platform chassis power linecard used \*number\*](#)

**Tree** [used](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**total**

<b>Description</b>	Top-level container for total power usage and capacity
<b>Context</b>	<a href="#">platform chassis power total</a>
<b>Tree</b>	<a href="#">total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**capacity number**

<b>Description</b>	Total power capacity provided by all power supplies
<b>Context</b>	<a href="#">platform chassis power total capacity number</a>
<b>Tree</b>	<a href="#">capacity</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**peak number**

<b>Description</b>	Peak power used
<b>Context</b>	<a href="#">platform chassis power total peak number</a>
<b>Tree</b>	<a href="#">peak</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**required number**

<b>Description</b>	Power required to power on all present admin enabled components as part of power management
<b>Context</b>	<a href="#">platform chassis power total required number</a>
<b>Tree</b>	<a href="#">required</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used number**

<b>Description</b>	Used power
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<b>Context</b>	<a href="#">platform chassis power total used</a> <i>number</i>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **rebooting-at** *string*

<b>Description</b>	Indicates the date and time this component will reboot If empty, no delayed reboots are queued for this component. A non empty value implies that a delayed reboot operation has been triggered for this component, which can be aborted using 'tools platform <component> reboot cancel'.
<b>Context</b>	<a href="#">platform chassis rebooting-at</a> <i>string</i>
<b>Tree</b>	<a href="#">rebooting-at</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **removable** *boolean*

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform chassis removable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **secondary-mac-address** *string*

<b>Description</b>	MAC address programmed as a secondary terminating MAC address on every IP interface, across all network instances If an IP packet is received on a routed subinterface and it arrives with a DMAC equal to the secondary-mac-address then it is terminated and forwarded exactly the same way it would be forwarded if it had arrived on this subinterface with a DMAC equal to the subinterface MAC address.
<b>Context</b>	<a href="#">platform chassis secondary-mac-address</a> <i>string</i>
<b>Tree</b>	<a href="#">secondary-mac-address</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **serial-number** *string*

**Description** The serial number for this component  
**Context** [platform chassis serial-number](#) *string*  
**Tree** [serial-number](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **slots** *number*

**Description** The number of line card slots supported by the chassis  
**Context** [platform chassis slots](#) *number*  
**Tree** [slots](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **type** *string*

**Description** The chassis type  
**Context** [platform chassis type](#) *string*  
**Tree** [type](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **control slot** *string*

**Description** Top-level container for control module configuration and state  
**Context** [platform control slot](#) *string*  
**Tree** [control](#)  
**Configurable** True  
**Platforms** Supported on all platforms

**slot string**

<b>Description</b>	Slot identifier for the control module This is set to 'A' for systems without removable control modules.
<b>Context</b>	<a href="#">platform control slot string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bios**

<b>Description</b>	State related to the BIOS of this component
<b>Context</b>	<a href="#">platform control slot string bios</a>
<b>Tree</b>	<a href="#">bios</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**manufacturer string**

<b>Description</b>	The manufacturer of this component
<b>Context</b>	<a href="#">platform control slot string bios manufacturer string</a>
<b>Tree</b>	<a href="#">manufacturer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**software-version string**

<b>Description</b>	The software version of this component
<b>Context</b>	<a href="#">platform control slot string bios software-version string</a>
<b>Tree</b>	<a href="#">software-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**bootloader**

<b>Description</b>	State related to the boot loader of this component
<b>Context</b>	<a href="#">platform control slot string bootloader</a>



<b>Tree</b>	<a href="#">bootloader</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**manufacturer *string***

<b>Description</b>	The manufacturer of this component
<b>Context</b>	<a href="#">platform control slot <i>string</i></a> <a href="#">bootloader <i>string</i></a> <a href="#">manufacturer <i>string</i></a>
<b>Tree</b>	<a href="#">manufacturer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**software-version *string***

<b>Description</b>	The software version of this component
<b>Context</b>	<a href="#">platform control slot <i>string</i></a> <a href="#">bootloader <i>string</i></a> <a href="#">software-version <i>string</i></a>
<b>Tree</b>	<a href="#">software-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cgroup *name string***

<b>Description</b>	List of cgroups present in the system
<b>Context</b>	<a href="#">platform control slot <i>string</i></a> <a href="#">cgroup <i>name string</i></a>
<b>Tree</b>	<a href="#">cgroup</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name *string***

<b>Description</b>	Name of the cgroup, as defined by its directory location in the filesystem
<b>Context</b>	<a href="#">platform control slot <i>string</i></a> <a href="#">cgroup <i>name string</i></a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cpuacct-statistics**

<b>Description</b>	Top-level container for cgroup cpuacct statistics
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">cpuacct-statistics</a>
<b>Tree</b>	<a href="#">cpuacct-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system number**

<b>Description</b>	CPU usage user system
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">cpuacct-statistics system number</a>
<b>Tree</b>	<a href="#">system</a>
<b>Units</b>	useconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**user number**

<b>Description</b>	CPU usage user mode
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">cpuacct-statistics user number</a>
<b>Tree</b>	<a href="#">user</a>
<b>Units</b>	useconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**memory-statistics**

<b>Description</b>	Top-level container for cgroup memory statistics
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics</a>
<b>Tree</b>	<a href="#">memory-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**anon number**

<b>Description</b>	Amount of memory used in anonymous mappings such as brk(), sbrk(), and mmap(MAP_ANONYMOUS)
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics anon number</a>
<b>Tree</b>	<a href="#">anon</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**anon-thp number**

<b>Description</b>	Amount of memory used in anonymous mappings backed by transparent hugepages
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics anon-thp number</a>
<b>Tree</b>	<a href="#">anon-thp</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**current number**

<b>Description</b>	The total amount of memory currently being used by the cgroup and its descendants. Read from memory.current
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics current number</a>
<b>Tree</b>	<a href="#">current</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**current-swap number**

<b>Description</b>	The total amount of swap currently being used by the cgroup and its descendants. Read from memory.swap.current
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<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics current-swap</a> <i>number</i>
<b>Tree</b>	<a href="#">current-swap</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**file number**

<b>Description</b>	Amount of memory used to cache filesystem data, including tmpfs and shared memory
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics file</a> <i>number</i>
<b>Tree</b>	<a href="#">file</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**file-dirty number**

<b>Description</b>	Amount of cached filesystem data that was modified but not yet written back to disk
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics file-dirty</a> <i>number</i>
<b>Tree</b>	<a href="#">file-dirty</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**file-writeback number**

<b>Description</b>	Amount of cached filesystem data that was modified and is currently being written back to disk
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cgroup name</a> <i>string</i> <a href="#">memory-statistics file-writeback</a> <i>number</i>
<b>Tree</b>	<a href="#">file-writeback</a>
<b>Units</b>	bytes
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### kernel-stack *number*

**Description** Amount of memory allocated to kernel stacks

**Context** [platform control slot](#) *string* [cgroup name](#) *string* [memory-statistics kernel-stack number](#)

**Tree** [kernel-stack](#)

**Units** bytes

**Configurable** False

**Platforms** Supported on all platforms

### memory-events

**Description** Top-level container for cgroup memory events

**Context** [platform control slot](#) *string* [cgroup name](#) *string* [memory-statistics memory-events](#)

**Tree** [memory-events](#)

**Configurable** False

**Platforms** Supported on all platforms

### high *number*

**Description** The number of times processes of the cgroup are throttled and routed to perform direct memory reclaim because the high memory boundary was exceeded.

**Context** [platform control slot](#) *string* [cgroup name](#) *string* [memory-statistics memory-events high number](#)

**Tree** [high](#)

**Configurable** False

**Platforms** Supported on all platforms

### low *number*

**Description** The number of times the cgroup is reclaimed due to high memory pressure even though its usage is under the low boundary.

**Context** [platform control slot](#) *string* [cgroup name](#) *string* [memory-statistics memory-events low number](#)

<b>Tree</b>	<a href="#">low</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max number**

<b>Description</b>	The number of times the cgroup's memory usage was about to go over the max boundary
<b>Context</b>	<a href="#">platform control slot string cgroup name string memory-statistics memory-events max number</a>
<b>Tree</b>	<a href="#">max</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oom number**

<b>Description</b>	The number of time the cgroup's memory usage had reached the limit and allocation was about to fail
<b>Context</b>	<a href="#">platform control slot string cgroup name string memory-statistics memory-events oom number</a>
<b>Tree</b>	<a href="#">oom</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oom-kill number**

<b>Description</b>	The number of processes belonging to this cgroup killed by any kind of out-of-memory killer
<b>Context</b>	<a href="#">platform control slot string cgroup name string memory-statistics memory-events oom-kill number</a>
<b>Tree</b>	<a href="#">oom-kill</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**slab number**

<b>Description</b>	Amount of memory used for storing in-kernel data structures
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<b>Context</b>	<a href="#">platform control slot string cgroup name string memory-statistics slab number</a>
<b>Tree</b>	<a href="#">slab</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**sock number**

<b>Description</b>	Amount of memory used in network transmission buffers
<b>Context</b>	<a href="#">platform control slot string cgroup name string memory-statistics sock number</a>
<b>Tree</b>	<a href="#">sock</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**clei-code string**

<b>Description</b>	The Common Language Identification Code for this component
<b>Context</b>	<a href="#">platform control slot string clei-code string</a>
<b>Tree</b>	<a href="#">clei-code</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cpu index (keyword | number)**

<b>Description</b>	List of all CPUs in the system
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number)</a>
<b>Tree</b>	<a href="#">cpu</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**index (keyword | number)**

<b>Description</b>	CPU index for each processor core on the system
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On a single-core system, the index should be zero. The 'all' index signifies an aggregation of the CPU utilization statistics over all cores in the system.

<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number)</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>all Index value indicating all CPUs in the system</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **architecture** *keyword*

<b>Description</b>	Architecture supported by the CPU
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) architecture keyword</a>
<b>Tree</b>	<a href="#">architecture</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>x86_64</li> <li>aarch64</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **hardware-interrupt**

<b>Description</b>	Time spent servicing hardware interrupts
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) hardware-interrupt</a>
<b>Tree</b>	<a href="#">hardware-interrupt</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **average-1** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) hardware-interrupt average-1 number</a>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**average-15** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">hardware-interrupt</a> <a href="#">average-15</a> <i>number</i>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-5** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">hardware-interrupt</a> <a href="#">average-5</a> <i>number</i>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant** *number*

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">hardware-interrupt</a> <a href="#">instant</a> <i>number</i>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**idle**

<b>Description</b>	Time spent idle
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">idle</a>
<b>Tree</b>	<a href="#">idle</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **average-1 number**

**Description** The arithmetic mean value of this statistic over the last minute

**Context** [platform control slot string cpu index \(keyword | number\) idle average-1 number](#)

**Tree** [average-1](#)

**Range** 0 to 100

**Configurable** False

**Platforms** Supported on all platforms

### **average-15 number**

**Description** The arithmetic mean value of this statistic over the last fifteen minutes

**Context** [platform control slot string cpu index \(keyword | number\) idle average-15 number](#)

**Tree** [average-15](#)

**Range** 0 to 100

**Configurable** False

**Platforms** Supported on all platforms

### **average-5 number**

**Description** The arithmetic mean value of this statistic over the last five minutes

**Context** [platform control slot string cpu index \(keyword | number\) idle average-5 number](#)

**Tree** [average-5](#)

**Range** 0 to 100

**Configurable** False

**Platforms** Supported on all platforms

### **instant number**

**Description** The instantaneous percentage value

**Context** [platform control slot string cpu index \(keyword | number\) idle instant number](#)

**Tree** [instant](#)

<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **iowait**

<b>Description</b>	Time spent idle, waiting for an outstanding disk I/O request
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">iowait</a>
<b>Tree</b>	<a href="#">iowait</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **average-1** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">iowait</a> <a href="#">average-1</a> <i>number</i>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **average-15** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">iowait</a> <a href="#">average-15</a> <i>number</i>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **average-5** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">iowait</a> <a href="#">average-5</a> <i>number</i>

<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant *number***

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword</i>   <i>number</i> ) <a href="#">iowait</a> <a href="#">instant number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**nice**

<b>Description</b>	Time spent running low-priority (niced) user processes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword</i>   <i>number</i> ) <a href="#">nice</a>
<b>Tree</b>	<a href="#">nice</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-1 *number***

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword</i>   <i>number</i> ) <a href="#">nice</a> <a href="#">average-1 number</a>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-15 *number***

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
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<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) nice average-15 number</a>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-5 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) nice average-5 number</a>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant number**

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) nice instant number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**software-interrupt**

<b>Description</b>	Time spent servicing software interrupts
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) software-interrupt</a>
<b>Tree</b>	<a href="#">software-interrupt</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-1 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">software-interrupt</a> <a href="#">average-1 number</a>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-15 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">software-interrupt</a> <a href="#">average-15 number</a>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-5 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">software-interrupt</a> <a href="#">average-5 number</a>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant number**

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">software-interrupt</a> <a href="#">instant number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**speed** *decimal-number*

<b>Description</b>	Capable speed of the CPU
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">speed</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">speed</a>
<b>Units</b>	gigahertz
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system**

<b>Description</b>	Time spent executing at the system level This can otherwise be known as kernel time, and does not include time spent servicing hardware and software interrupts.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">system</a>
<b>Tree</b>	<a href="#">system</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-1** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">system</a> <a href="#">average-1</a> <i>number</i>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-15** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
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<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) system average-15 number</a>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **average-5 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) system average-5 number</a>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **instant number**

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) system instant number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total**

<b>Description</b>	Total CPU utilization
<b>Context</b>	<a href="#">platform control slot string cpu index (keyword   number) total</a>
<b>Tree</b>	<a href="#">total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**average-1 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">total average-1 number</a>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-15 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">total average-15 number</a>
<b>Tree</b>	<a href="#">average-15</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-5 number**

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">total average-5 number</a>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant number**

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">total instant number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *string*

<b>Description</b>	Model name of the CPU
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">type</a> <i>string</i>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**user**

<b>Description</b>	Time spent executing at the user level This can otherwise be known as application or user space time.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">user</a>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-1** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last minute
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">user</a> <a href="#">average-1</a> <i>number</i>
<b>Tree</b>	<a href="#">average-1</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-15** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last fifteen minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">user</a> <a href="#">average-15</a> <i>number</i>
<b>Tree</b>	<a href="#">average-15</a>

<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**average-5** *number*

<b>Description</b>	The arithmetic mean value of this statistic over the last five minutes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">user average-5</a> <i>number</i>
<b>Tree</b>	<a href="#">average-5</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant** *number*

<b>Description</b>	The instantaneous percentage value
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">cpu index</a> ( <i>keyword   number</i> ) <a href="#">user instant</a> <i>number</i>
<b>Tree</b>	<a href="#">instant</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**disk name** *string*

<b>Description</b>	List of disks present in the system
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i>
<b>Tree</b>	<a href="#">disk</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the disk, as defined by its physical location in the system
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **encrypted** *boolean*

**Description** Indicates if the disk is encrypted  
**Context** [platform control slot](#) *string* [disk name](#) *string* [encrypted](#) *boolean*  
**Tree** [encrypted](#)  
**Configurable** False  
**Platforms** 7250 IXR-10e, 7250 IXR-6e

### **model-number** *string*

**Description** Model name of the disk  
**Context** [platform control slot](#) *string* [disk name](#) *string* [model-number](#) *string*  
**Tree** [model-number](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **partition name** *string*

**Description** List of partitions available on this disk  
**Context** [platform control slot](#) *string* [disk name](#) *string* [partition name](#) *string*  
**Tree** [partition](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **name** *string*

**Description** Name of the partition  
**Context** [platform control slot](#) *string* [disk name](#) *string* [partition name](#) *string*  
**Configurable** False  
**Platforms** Supported on all platforms

### **encrypted** *boolean*

**Description** Indicates if the partition is encrypted using disk encryption

<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">encrypted</a> <i>boolean</i>
<b>Tree</b>	<a href="#">encrypted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

**free number**

<b>Description</b>	Space free on the partition
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">free number</a>
<b>Tree</b>	<a href="#">free</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**mount-point** *string*

<b>Description</b>	Path to where this partition is mounted
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">mount-point</a> <i>string</i>
<b>Tree</b>	<a href="#">mount-point</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**mount-status** *keyword*

<b>Description</b>	Current mount status of this partition
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">mount-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mount-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ro Partition is currently mounted read-only</li> <li>• rw Partition is currently mounted read-write</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**percent-used** *number*

<b>Description</b>	Percentage of the partition in use
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">percent-used</a> <i>number</i>
<b>Tree</b>	<a href="#">percent-used</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**size** *number*

<b>Description</b>	Size of the partition
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">size</a> <i>number</i>
<b>Tree</b>	<a href="#">size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**used** *number*

<b>Description</b>	Space used on the partition
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">used</a> <i>number</i>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**uuid** *string*

<b>Description</b>	UUID of the partition
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">partition name</a> <i>string</i> <a href="#">uuid</a> <i>string</i>
<b>Tree</b>	<a href="#">uuid</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**serial-number** *string*

<b>Description</b>	Serial number of the disk
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">serial-number</a> <i>string</i>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**size** *number*

<b>Description</b>	Total size of the disk
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">size</a> <i>number</i>
<b>Tree</b>	<a href="#">size</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Top-level container for disk statistics
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**io-errors** *number*

<b>Description</b>	Enter the io-errors context
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">io-errors</a> <i>number</i>
<b>Tree</b>	<a href="#">io-errors</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-erase-count** *number*

<b>Description</b>	Enter the max-erase-count context
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<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">max-erase-count</a> <i>number</i>
<b>Tree</b>	<a href="#">max-erase-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **read-per-second** *decimal-number*

<b>Description</b>	Indicates the amount of data read from the device per second
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">read-per-second</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">read-per-second</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **transfers-per-second** *decimal-number*

<b>Description</b>	Indicates the number of transfers per second that were issued to the device. A transfer is an I/O request to the device. Multiple logical requests can be combined into a single I/O request to the device. A transfer is of indeterminate size.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">transfers-per-second</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">transfers-per-second</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **utilization** *number*

<b>Description</b>	The current tps utilization of the disk, expressed as a percentage
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">utilization</a> <i>number</i>
<b>Tree</b>	<a href="#">utilization</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms



**written-per-second** *decimal-number*

<b>Description</b>	Indicates the amount of data written to the device per second
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">statistics</a> <a href="#">written-per-second</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">written-per-second</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Type of disk
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• compactflash</li> <li>• ssd</li> <li>• hdd</li> <li>• usb</li> <li>• mmc</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**disk-encrypted** *boolean*

<b>Description</b>	Indicates if the disk is encrypted on a control module
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">disk-encrypted</a> <i>boolean</i>
<b>Tree</b>	<a href="#">disk-encrypted</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

**failure-reason** *string*

<b>Description</b>	The reason the component transitioned to a failed state Field is empty if the component is not currently in a failure state
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">failure-reason</a> <i>string</i>

<b>Tree</b>	<a href="#">failure-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## forwarding-plane

<b>Description</b>	Container for state related to the datapath on the control card
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane</a>
<b>Tree</b>	<a href="#">forwarding-plane</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## fib-table

<b>Description</b>	A representation of the IP FIB table maintained by each control card
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane</a> <a href="#">fib-table</a>
<b>Tree</b>	<a href="#">fib-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## programming-progress

<b>Description</b>	State that shows the FIB programming progress of the forwarding complex
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane</a> <a href="#">fib-table</a> <a href="#">programming-progress</a>
<b>Tree</b>	<a href="#">programming-progress</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip-routes

<b>Description</b>	Container for the FIB programming state of IP route entries
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane</a> <a href="#">fib-table</a> <a href="#">programming-progress</a> <a href="#">ip-routes</a>
<b>Tree</b>	<a href="#">ip-routes</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### entries-remaining-to-add *number*

<b>Description</b>	The number of entries that need to be created in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform control slot <i>string</i> forwarding-plane fib-table programming-progress ip-routes entries-remaining-to-add <i>number</i></a>
<b>Tree</b>	<a href="#">entries-remaining-to-add</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### entries-remaining-to-modify *number*

<b>Description</b>	The number of entries that need to be modified in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform control slot <i>string</i> forwarding-plane fib-table programming-progress ip-routes entries-remaining-to-modify <i>number</i></a>
<b>Tree</b>	<a href="#">entries-remaining-to-modify</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-sync-time *string*

<b>Description</b>	The time when the forwarding complex last reached sync with the control plane A linecard reaches sync when both entries-remaining-to-add and entries-remaining-to-modify reach zero
<b>Context</b>	<a href="#">platform control slot <i>string</i> forwarding-plane fib-table programming-progress ip-routes last-sync-time <i>string</i></a>
<b>Tree</b>	<a href="#">last-sync-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop-groups

<b>Description</b>	Container for the FIB programming state of next-hop-group (NHG) entries
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane fib-table programming-progress next-hop-groups</a>
<b>Tree</b>	<a href="#">next-hop-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entries-remaining-to-add *number*

<b>Description</b>	The number of entries that need to be created in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane fib-table programming-progress next-hop-groups entries-remaining-to-add</a> <i>number</i>
<b>Tree</b>	<a href="#">entries-remaining-to-add</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entries-remaining-to-modify *number*

<b>Description</b>	The number of entries that need to be modified in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">forwarding-plane fib-table programming-progress next-hop-groups entries-remaining-to-modify</a> <i>number</i>
<b>Tree</b>	<a href="#">entries-remaining-to-modify</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-sync-time *string*

**Description** The time when the forwarding complex last reached sync with the control plane  
A linecard reaches sync when both entries-remaining-to-add and entries-remaining-to-modify reach zero

**Context** [platform control slot \*string\* forwarding-plane fib-table programming-progress next-hop-groups last-sync-time \*string\*](#)

**Tree** [last-sync-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## healthz

**Description** The health of the component  
The paramaters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.

**Context** [platform control slot \*string\* healthz](#)

**Tree** [healthz](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-unhealthy *string*

**Description** Last unhealthy time

The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.

<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">healthz last-unhealthy</a> <i>string</i>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **status** *keyword*

<b>Description</b>	Health status The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">healthz status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified Unspecified status The component's health status has not yet been checked by the system.</li> <li>healthy Healthy status The component is in a healthy state, and is operating within the expected parameters.</li> <li>unhealthy Unhealthy status The component is in a unhealthy state, it is not performing the function expected of it.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unhealthy-count** *number*

<b>Description</b>	Unhealthy count
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The number of times the component has transitioned from the healthy state to any other state.

<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">healthz unhealthy-count</a> <i>number</i>
<b>Tree</b>	<a href="#">unhealthy-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface name** *identityref*

<b>Description</b>	Enter the interface list instance
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">interface name</a> <i>identityref</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *identityref*

<b>Description</b>	Name of a specific control module interface
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">interface name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>usb The single USB type A interface present on the control module</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Set the administrative state of this interface
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">interface name</a> <i>identityref</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Indicates the current operational state of this interface
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">interface name</a> <i>identityref</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting</li> </ul>



This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-booted** *string*

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-booted</a> <i>string</i>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-booted-reason** *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-booted-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>user-initiated-reboot</code> A user initiated the reboot directly via a management interface</li> <li>• <code>power-failure</code> The system rebooted the component due to insufficient power</li> <li>• <code>critical-error</code> The system rebooted the component due to an internal critical error</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-change</a> <i>string</i>

<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-switchover-reason

<b>Description</b>	State information relating to the last control module switchover
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-switchover-reason</a>
<b>Tree</b>	<a href="#">last-switchover-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### details *string*

<b>Description</b>	Any additional details relating to the last switchover This field is not populated if the system has not performed a switchover since initial startup.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-switchover-reason</a> <a href="#">details</a> <i>string</i>
<b>Tree</b>	<a href="#">details</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### trigger *identityref*

<b>Description</b>	Indicates the trigger of the last switchover This field is not populated if the system has not performed a switchover since initial startup.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">last-switchover-reason</a> <a href="#">trigger</a> <i>identityref</i>
<b>Tree</b>	<a href="#">trigger</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated A user initiated the switchover directly via the tools schema</li> <li>• control-reboot A user initiated the switchover indirectly via rebooting the active control module</li> <li>• control-failure</li> </ul>

The system has forced a switchover due to a failure on the active control module

- linecard-connectivity

The system has forced a switchover due to a loss of connectivity between the active control module and one or more linecards

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **locator-state** *keyword*

<b>Description</b>	Details if the locator LED is active on this component
<b>Context</b>	<a href="#">platform control slot string locator-state keyword</a>
<b>Tree</b>	<a href="#">locator-state</a>
<b>Default</b>	inactive
<b>Options</b>	<ul style="list-style-type: none"> <li>• active Locator LED is currently active</li> <li>• inactive Locator LED is currently inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **manufactured-date** *string*

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform control slot string manufactured-date string</a>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **memory**

<b>Description</b>	Top-level container for system memory state
<b>Context</b>	<a href="#">platform control slot string memory</a>
<b>Tree</b>	<a href="#">memory</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **free number**

**Description** Memory available for system use  
**Context** [platform control slot](#) *string* [memory free number](#)  
**Tree** [free](#)  
**Units** bytes  
**Configurable** False  
**Platforms** Supported on all platforms

### **physical number**

**Description** Total physical memory available on this component  
**Context** [platform control slot](#) *string* [memory physical number](#)  
**Tree** [physical](#)  
**Units** bytes  
**Configurable** False  
**Platforms** Supported on all platforms

### **reserved number**

**Description** Memory reserved for system use  
**Context** [platform control slot](#) *string* [memory reserved number](#)  
**Tree** [reserved](#)  
**Units** bytes  
**Configurable** False  
**Platforms** Supported on all platforms

### **utilization number**

**Description** Total memory utilized  
**Context** [platform control slot](#) *string* [memory utilization number](#)  
**Tree** [utilization](#)  
**Range** 0 to 100  
**Configurable** False

**Platforms** Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting</li> </ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **part-number** *string*

<b>Description</b>	Part number for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">part-number</a> <i>string</i>
<b>Tree</b>	<a href="#">part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **power**

<b>Description</b>	State related to power consumption and allocation for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">power</a>
<b>Tree</b>	<a href="#">power</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **required** *number*

<b>Description</b>	The power budget required to enable this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">power required</a> <i>number</i>
<b>Tree</b>	<a href="#">required</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **used** *number*

<b>Description</b>	The power in use by this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">power used</a> <i>number</i>
<b>Tree</b>	<a href="#">used</a>

<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**process** *pid number*

<b>Description</b>	List of system processes
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">process pid number</a>
<b>Tree</b>	<a href="#">process</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pid** *number*

<b>Description</b>	The process ID
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">process pid number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**args** *string*

<b>Description</b>	Current process command line arguments Arguments with a parameter (e.g., --option 10 or -option=10) should be represented as a single element of the list with the argument name and parameter together. Flag arguments, i.e., those without a parameter should also be in their own list element.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">process pid number</a> <a href="#">args string</a>
<b>Tree</b>	<a href="#">args</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cpu-utilization** *number*

<b>Description</b>	The percentage of CPU that is being used by the process
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">process pid number</a> <a href="#">cpu-utilization number</a>
<b>Tree</b>	<a href="#">cpu-utilization</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **memory-usage** *number*

**Description** Bytes allocated and in use by the process

**Context** [platform control slot](#) *string* [process pid](#) *number* [memory-usage](#) *number*

**Tree** [memory-usage](#)

**Units** bytes

**Configurable** False

**Platforms** Supported on all platforms

### **memory-utilization** *number*

**Description** The percentage of RAM that is being used by the process

**Context** [platform control slot](#) *string* [process pid](#) *number* [memory-utilization](#) *number*

**Tree** [memory-utilization](#)

**Range** 0 to 100

**Configurable** False

**Platforms** Supported on all platforms

### **name** *string*

**Description** The process name

**Context** [platform control slot](#) *string* [process pid](#) *number* [name](#) *string*

**Tree** [name](#)

**Configurable** False

**Platforms** Supported on all platforms

### **start-time** *string*

**Description** The time at which this process started

**Context** [platform control slot](#) *string* [process pid](#) *number* [start-time](#) *string*

**Tree** [start-time](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms



**rebooting-at** *string*

<b>Description</b>	Indicates the date and time this component will reboot If empty, no delayed reboots are queued for this component. A non empty value implies that a delayed reboot operation has been triggered for this component, which can be aborted using 'tools platform <component> reboot cancel'.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">rebooting-at</a> <i>string</i>
<b>Tree</b>	<a href="#">rebooting-at</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**removable** *boolean*

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">removable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**role** *keyword*

<b>Description</b>	Control module role, detailing active or standby state This field is not present on systems without removable control modules.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">role</a> <i>keyword</i>
<b>Tree</b>	<a href="#">role</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• active</li> <li>• standby</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**serial-number** *string*

<b>Description</b>	The serial number for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">serial-number</a> <i>string</i>

<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **software-version** *string*

<b>Description</b>	Image version version running on this component  This version is the squashfs version, and may not represent the current per-application versions if versions have been modified after the system has been installed.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">software-version</a> <i>string</i>
<b>Tree</b>	<a href="#">software-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **temperature**

<b>Description</b>	State related to temperature for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature</a>
<b>Tree</b>	<a href="#">temperature</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **alarm-status** *boolean*

<b>Description</b>	Indicates if a temperature sensor of this component is currently in an alarm state  An alarm state is triggered if the margin is $\leq 2$ degrees, indicating that a thermal protection shut down is imminent unless adequate system cooling is provided to bring the temperature sensor back into safe operating ranges.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature alarm-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">alarm-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant** *number*

<b>Description</b>	Represents the highest current temperature of any sensor on this component Note that as multiple sensors may feed in, that this field and the margin field may be referencing different sensors.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature instant</a> <i>number</i>
<b>Tree</b>	<a href="#">instant</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**margin** *number*

<b>Description</b>	Indicates the lowest alarm margin of any sensor on this component The margin is the delta between the current sensor temperature and the thermal protection threshold for that sensor. Note that as multiple sensors may feed in, that this field and the instant field may be referencing different sensors.
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature margin</a> <i>number</i>
<b>Tree</b>	<a href="#">margin</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**maximum** *number*

<b>Description</b>	Represents the highest temperature any sensor on this component has reached since it booted
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature maximum</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**maximum-time** *string*

<b>Description</b>	Indicates the time this component reached the temperature referenced in the maximum field
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">temperature maximum-time</a> <i>string</i>
<b>Tree</b>	<a href="#">maximum-time</a>

<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *string*

<b>Description</b>	Control module type, as translated from the components EEPROM
<b>Context</b>	<a href="#">platform control slot</a> <i>string type string</i>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**fabric slot** *number*

<b>Description</b>	Top-level container for fabric configuration and state
<b>Context</b>	<a href="#">platform fabric slot</a> <i>number</i>
<b>Tree</b>	<a href="#">fabric</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**slot** *number*

<b>Description</b>	Numeric identifier for the fabric module
<b>Context</b>	<a href="#">platform fabric slot</a> <i>number</i>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**admin-state** *keyword*

<b>Description</b>	The administrative state of this component
<b>Context</b>	<a href="#">platform fabric slot</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>

	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **clei-code** *string*

<b>Description</b>	The Common Language Identification Code for this component
<b>Context</b>	<a href="#">platform fabric slot number clei-code string</a>
<b>Tree</b>	<a href="#">clei-code</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **failure-reason** *string*

<b>Description</b>	The reason the component transitioned to a failed state Field is empty if the component is not currently in a failure state
<b>Context</b>	<a href="#">platform fabric slot number failure-reason string</a>
<b>Tree</b>	<a href="#">failure-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **healthz**

<b>Description</b>	The health of the component  The paramaters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.
<b>Context</b>	<a href="#">platform fabric slot number healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-unhealthy string**

<b>Description</b>	Last unhealthy time The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.
<b>Context</b>	<a href="#">platform fabric slot number healthz last-unhealthy string</a>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**status keyword**

<b>Description</b>	Health status The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform fabric slot number healthz status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified Unspecified status The component's health status has not yet been checked by the system.</li> <li>healthy Healthy status The component is in a healthy state, and is operating within the expected parameters.</li> <li>unhealthy Unhealthy status The component is in a unhealthy state, it is not performing the function expected of it.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unhealthy-count** *number*

<b>Description</b>	Unhealthy count The number of times the component has transitioned from the healthy state to any other state.
<b>Context</b>	<a href="#">platform fabric slot number healthz unhealthy-count number</a>
<b>Tree</b>	<a href="#">unhealthy-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-booted** *string*

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform fabric slot number last-booted string</a>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**last-booted-reason** *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform fabric slot number last-booted-reason identityref</a>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated-reboot A user initiated the reboot directly via a management interface</li> <li>• power-failure The system rebooted the component due to insufficient power</li> <li>• critical-error</li> </ul>

The system rebooted the component due to an internal critical error

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **last-change string**

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform fabric slot number last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **locator-state keyword**

<b>Description</b>	Details if the locator LED is active on this component
<b>Context</b>	<a href="#">platform fabric slot number locator-state keyword</a>
<b>Tree</b>	<a href="#">locator-state</a>
<b>Default</b>	inactive
<b>Options</b>	<ul style="list-style-type: none"> <li>active Locator LED is currently active</li> <li>inactive Locator LED is currently inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **manufactured-date string**

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform fabric slot number manufactured-date string</a>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e



**oper-state keyword**

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform fabric slot number oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**part-number string**

<b>Description</b>	Part number for this component
<b>Context</b>	<a href="#">platform fabric slot number part-number string</a>
<b>Tree</b>	<a href="#">part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**power**

<b>Description</b>	State related to power consumption and allocation for this component
<b>Context</b>	<a href="#">platform fabric slot number power</a>
<b>Tree</b>	<a href="#">power</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**required number**

<b>Description</b>	The power budget required to enable this component
<b>Context</b>	<a href="#">platform fabric slot number power required number</a>
<b>Tree</b>	<a href="#">required</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used number**

<b>Description</b>	The power in use by this component
<b>Context</b>	<a href="#">platform fabric slot number power used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**rebooting-at** *string*

<b>Description</b>	Indicates the date and time this component will reboot If empty, no delayed reboots are queued for this component. A non empty value implies that a delayed reboot operation has been triggered for this component, which can be aborted using 'tools platform <component> reboot cancel'.
<b>Context</b>	<a href="#">platform fabric slot number rebooting-at string</a>
<b>Tree</b>	<a href="#">rebooting-at</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**removable** *boolean*

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform fabric slot number removable boolean</a>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**serial-number** *string*

<b>Description</b>	The serial number for this component
<b>Context</b>	<a href="#">platform fabric slot number serial-number string</a>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**temperature**

<b>Description</b>	State related to temperature for this component
<b>Context</b>	<a href="#">platform fabric slot number temperature</a>
<b>Tree</b>	<a href="#">temperature</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**alarm-status** *boolean*

<b>Description</b>	Indicates if a temperature sensor of this component is currently in an alarm state  An alarm state is triggered if the margin is $\leq 2$ degrees, indicating that a thermal protection shut down is imminent unless adequate system cooling is provided to bring the temperature sensor back into safe operating ranges.
<b>Context</b>	<a href="#">platform fabric slot number temperature alarm-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">alarm-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**instant** *number*

<b>Description</b>	Represents the highest current temperature of any sensor on this component  Note that as multiple sensors may feed in, that this field and the margin field may be referencing different sensors.
<b>Context</b>	<a href="#">platform fabric slot number temperature instant</a> <i>number</i>
<b>Tree</b>	<a href="#">instant</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**margin** *number*

<b>Description</b>	Indicates the lowest alarm margin of any sensor on this component  The margin is the delta between the current sensor temperature and the thermal protection threshold for that sensor. Note that as multiple sensors may feed in, that this field and the instant field may be referencing different sensors.
<b>Context</b>	<a href="#">platform fabric slot number temperature margin</a> <i>number</i>
<b>Tree</b>	<a href="#">margin</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**maximum** *number*

<b>Description</b>	Represents the highest temperature any sensor on this component has reached since it booted
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<b>Context</b>	<a href="#">platform fabric slot number temperature maximum number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### maximum-time *string*

<b>Description</b>	Indicates the time this component reached the temperature referenced in the maximum field
<b>Context</b>	<a href="#">platform fabric slot number temperature maximum-time string</a>
<b>Tree</b>	<a href="#">maximum-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### type *string*

<b>Description</b>	Fabric module type, as translated from the components EEPROM
<b>Context</b>	<a href="#">platform fabric slot number type string</a>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### fan-tray *id number*

<b>Description</b>	Top-level container for fan module configuration and state
<b>Context</b>	<a href="#">platform fan-tray id number</a>
<b>Tree</b>	<a href="#">fan-tray</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### id *number*

<b>Description</b>	Numeric identifier for the fan tray
<b>Context</b>	<a href="#">platform fan-tray id number</a>
<b>Range</b>	1 to 255

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **clei-code *string***

<b>Description</b>	The Common Language Identification Code for this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">clei-code</a> <i>string</i>
<b>Tree</b>	<a href="#">clei-code</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **failure-reason *string***

<b>Description</b>	The reason the component transitioned to a failed state Field is empty if the component is not currently in a failure state
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">failure-reason</a> <i>string</i>
<b>Tree</b>	<a href="#">failure-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **healthz**

<b>Description</b>	The health of the component  The paramaters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-unhealthy string**

<b>Description</b>	Last unhealthy time The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.
<b>Context</b>	<a href="#">platform fan-tray id</a> <a href="#">number healthz last-unhealthy string</a>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**status keyword**

<b>Description</b>	Health status The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform fan-tray id</a> <a href="#">number healthz status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified Unspecified status The component's health status has not yet been checked by the system.</li> <li>healthy Healthy status The component is in a healthy state, and is operating within the expected parameters.</li> <li>unhealthy Unhealthy status The component is in a unhealthy state, it is not performing the function expected of it.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unhealthy-count** *number*

<b>Description</b>	Unhealthy count The number of times the component has transitioned from the healthy state to any other state.
<b>Context</b>	<a href="#">platform fan-tray id number healthz unhealthy-count number</a>
<b>Tree</b>	<a href="#">unhealthy-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-booted** *string*

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform fan-tray id number last-booted string</a>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted-reason** *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform fan-tray id number last-booted-reason identityref</a>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated-reboot A user initiated the reboot directly via a management interface</li> <li>• power-failure The system rebooted the component due to insufficient power</li> <li>• critical-error</li> </ul>



The system rebooted the component due to an internal critical error

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **locator-state** *keyword*

<b>Description</b>	Details if the locator LED is active on this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">locator-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">locator-state</a>
<b>Default</b>	inactive
<b>Options</b>	<ul style="list-style-type: none"> <li>• active Locator LED is currently active</li> <li>• inactive Locator LED is currently inactive</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **manufactured-date** *string*

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">manufactured-date</a> <i>string</i>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-reason** *keyword*

<b>Description</b>	Indicates the reason for the current state of this fan tray
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">oper-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>fault</b> Hardware fault detected</li> <li>• <b>eeeprom-invalid</b> EEPROM of this fan tray is either invalid or corrupt</li> <li>• <b>airflow-mismatch</b> The detected airflow of this fan tray does not match the system-calculated airflow direction  The logic for determining the system-calculated direction is: - Majority wins between present fan trays - In the case where there are equal F2B or B2F fan-trays, PSUs are used as a tie break (PSUs only are counted in the event a tie breaker is needed) - F2B wins if no tie break can be used</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>up</b> Component or process is operational</li> <li>• <b>down</b> Component or process is not operational</li> <li>• <b>empty</b> Component slot is empty</li> <li>• <b>downloading</b> Component is downloading image into memory</li> <li>• <b>booting</b> Component is booting downloaded image</li> <li>• <b>starting</b> Component image operational, application processes starting</li> <li>• <b>failed</b></li> </ul>

- Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **part-number** *string*

<b>Description</b>	Part number for this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">part-number</a> <i>string</i>
<b>Tree</b>	<a href="#">part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **power**

<b>Description</b>	State related to power consumption and allocation for this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">power</a>
<b>Tree</b>	<a href="#">power</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**required** *number*

<b>Description</b>	The power budget required to enable this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">power required</a> <i>number</i>
<b>Tree</b>	<a href="#">required</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used** *number*

<b>Description</b>	The power in use by this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">power used</a> <i>number</i>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**removable** *boolean*

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">removable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**serial-number** *string*

<b>Description</b>	The serial number for this component
<b>Context</b>	<a href="#">platform fan-tray id</a> <i>number</i> <a href="#">serial-number</a> <i>string</i>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**speed number**

<b>Description</b>	The current speed of the fan tray
<b>Context</b>	<a href="#">platform fan-tray id number speed number</a>
<b>Tree</b>	<a href="#">speed</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**speed-rpm number**

<b>Description</b>	The current RPM of the fan tray
<b>Context</b>	<a href="#">platform fan-tray id number speed-rpm number</a>
<b>Tree</b>	<a href="#">speed-rpm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**type string**

<b>Description</b>	Fan tray type, as translated from the components EEPROM
<b>Context</b>	<a href="#">platform fan-tray id number type string</a>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**linecard slot number**

<b>Description</b>	Top-level container for linecard configuration and state
<b>Context</b>	<a href="#">platform linecard slot number</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**slot number**

<b>Description</b>	Numeric identifier for the linecard
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<b>Context</b>	<a href="#">platform linecard slot number</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	The administrative state of this component
<b>Context</b>	<a href="#">platform linecard slot number admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **bios**

<b>Description</b>	State related to the BIOS of this component
<b>Context</b>	<a href="#">platform linecard slot number bios</a>
<b>Tree</b>	<a href="#">bios</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **manufacturer** *string*

<b>Description</b>	The manufacturer of this component
<b>Context</b>	<a href="#">platform linecard slot number bios manufacturer string</a>
<b>Tree</b>	<a href="#">manufacturer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **software-version** *string*

<b>Description</b>	The software version of this component
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<b>Context</b>	<a href="#">platform linecard slot number bios software-version string</a>
<b>Tree</b>	<a href="#">software-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**clei-code string**

<b>Description</b>	The Common Language Identification Code for this component
<b>Context</b>	<a href="#">platform linecard slot number clei-code string</a>
<b>Tree</b>	<a href="#">clei-code</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failure-reason string**

<b>Description</b>	The reason the component transitioned to a failed state Field is empty if the component is not currently in a failure state
<b>Context</b>	<a href="#">platform linecard slot number failure-reason string</a>
<b>Tree</b>	<a href="#">failure-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**forwarding-complex name keyword**

<b>Description</b>	List of forwarding complexes on the linecard
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword</a>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name keyword**

<b>Description</b>	The identifier of the forwarding complex
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>0</li> </ul>

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<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## acl

<b>Description</b>	Enter the acl context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## resource name *identityref*

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword acl resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## name *identityref*

<b>Description</b>	The name of the ACL resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword acl resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">input-ipv4-filter-instances</a> This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on the forwarding complex. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every subinterface using the IPv4 filter.</li> <li>• <a href="#">input-ipv4-qos-multifield-instances</a> This resource is used every time an IPv4 multifield classifier policy is applied to ingress traffic on a subinterface.</li> <li>• <a href="#">input-ipv4-filter-instances-routed</a> This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on routed subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only;</li> </ul>



otherwise one instance is used for every routed subinterface using the IPv4 filter.

- input-ipv4-filter-instances-bridged

This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on bridged subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every bridged subinterface using the IPv4 filter.

- input-ipv6-filter-instances

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on the forwarding complex. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every subinterface using the IPv6 filter.

- input-ipv6-qos-multifield-instances

This resource is used every time an IPv6 multifield classifier policy is applied to ingress traffic on a subinterface.

- input-ipv6-filter-instances-routed

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on routed subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every routed subinterface using the IPv6 filter.

- input-ipv6-filter-instances-bridged

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on bridged subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every bridged subinterface using the IPv6 filter.

- if-input-ipv4-stats

Resource pool of stats entries available for ingress IPv4 ACLs

- if-input-ipv6-stats

Resource pool of stats entries available for ingress IPv6 ACLs

- if-output-ipv4-stats

Resource pool of stats entries available for egress IPv4 ACLs

- if-output-ipv6-stats

Resource pool of stats entries available for egress IPv6 ACLs

- if-output-cpm-stats

Resource pool of stats entries shared by egress IPv4/IPv6/MAC TCAM entries, and CPM-filter IPv4/IPv6/MAC TCAM entries

Egress Ipv4 -> uses single stat counter Egress Ipv6 -> uses single stat counter Egress MAC -> uses single stat counter Cpm Ipv4 -> uses two stat counters Cpm Ipv6 -> uses two stat counters Cpm MAC -> uses two stat counters

- **input-acl-qos-template-policers**  
This resource is used every time an IPv4 or IPv6 input subinterface filter entry uses a rate-limit policer, or, on TD4 only, a subinterface policer-template is used.
- **input-qos-template-policers**  
This resource is used every time a QoS subinterface policer-template is used.
- **input-acl-ipv4-policers**  
This resource is used every time an IPv4 input subinterface filter entry uses a rate-limit policer.
- **input-acl-ipv6-policers**  
This resource is used every time an IPv6 input subinterface filter entry uses a rate-limit policer.
- **output-acl-cpm-filter-policers**  
This resource is used every time an IPv4 or IPv6 output subinterface filter or CPM filter entry uses a rate-limit policer.

**Configurable**

False

**Platforms**

Supported on all platforms

**free number****Description**

The number of resources that are unused and available

**Context**[platform](#) [linecard slot number](#) [forwarding-complex name](#) [keyword](#) [acl resource name](#) [identityref](#) [free number](#)**Tree**[free](#)**Configurable**

False

**Platforms**

Supported on all platforms

**used number****Description**

The number of resources that are in use

**Context**[platform](#) [linecard slot number](#) [forwarding-complex name](#) [keyword](#) [acl resource name](#) [identityref](#) [used number](#)**Tree**[used](#)**Configurable**

False

**Platforms**

Supported on all platforms

**buffer-memory**

<b>Description</b>	Container for utilization statistics of the packet buffer memory
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory</a>
<b>Tree</b>	<a href="#">buffer-memory</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dram**

<b>Description</b>	Container for utilization statistics of the DRAM memory.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory dram</a>
<b>Tree</b>	<a href="#">dram</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**used number**

<b>Description</b>	Used DRAM memory
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory dram used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**free number**

<b>Description</b>	Available buffer memory, which equals the total memory less the used memory and the reserved memory.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory free number</a>

<b>Tree</b>	<a href="#">free</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4

### **reserved** *number*

<b>Description</b>	Buffer memory reserved for proper system operation and by the user (due to assignment of non-zero CBS for certain queues, on platforms that support CBS).
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory reserved number</a>
<b>Tree</b>	<a href="#">reserved</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4

### **root-pool** [index](#) *number*

<b>Description</b>	Enter the root-pool list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number</a>
<b>Tree</b>	<a href="#">root-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *number*

<b>Description</b>	Root-pool index
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**mid-pool index number**

<b>Description</b>	Enter the mid-pool list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number mid-pool index number</a>
<b>Tree</b>	<a href="#">mid-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Mid-pool index
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number mid-pool index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-size number**

<b>Description</b>	Operational size of the mid-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number mid-pool index number operational-size number</a>
<b>Tree</b>	<a href="#">operational-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**used number**

<b>Description</b>	Actual usage of the mid-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number mid-pool index number used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-size** *number*

<b>Description</b>	Operational size of the root-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number operational-size number</a>
<b>Tree</b>	<a href="#">operational-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**used** *number*

<b>Description</b>	Actual usage of the root-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory root-pool index number used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sram**

<b>Description</b>	Container for utilization statistics of the on-chip SRAM memory.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory sram</a>
<b>Tree</b>	<a href="#">sram</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**free** *number*

<b>Description</b>	Available SRAM memory
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory sram free number</a>
<b>Tree</b>	<a href="#">free</a>
<b>Units</b>	bytes

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**used number**

<b>Description</b>	Used SRAM memory
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory sram used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**system-reserved-pool**

<b>Description</b>	Operational size and the current usage of system-reserved-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory system-reserved-pool</a>
<b>Tree</b>	<a href="#">system-reserved-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-size number**

<b>Description</b>	Operational size of the system-reserved-pool
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory system-reserved-pool operational-size number</a>
<b>Tree</b>	<a href="#">operational-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**used number**

<b>Description</b>	Used buffer memory, excluding reserved memory.
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<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword buffer-memory used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4

### control-plane-traffic

<b>Description</b>	Counters related to traffic destined to the control-plane
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword control-plane-traffic</a>
<b>Tree</b>	<a href="#">control-plane-traffic</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### dropped-aggregate *number*

<b>Description</b>	The aggregation of all counters where the switch has dropped traffic related to the control plane
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword control-plane-traffic dropped-aggregate number</a>
<b>Tree</b>	<a href="#">dropped-aggregate</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### dropped-bytes-aggregate *number*

<b>Description</b>	The aggregation of all counters in bytes where the switch has dropped traffic related to the control plane
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword control-plane-traffic dropped-bytes-aggregate number</a>
<b>Tree</b>	<a href="#">dropped-bytes-aggregate</a>
<b>Default</b>	0



<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### queued-aggregate *number*

<b>Description</b>	The aggregation of all counters where the switch has enqueued traffic related to the control plane
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword control-plane-traffic queued-aggregate <i>number</i></a>
<b>Tree</b>	<a href="#">queued-aggregate</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### queued-bytes-aggregate *number*

<b>Description</b>	The aggregation of all counters in bytes where the switch has enqueued traffic related to the control plane
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword control-plane-traffic queued-bytes-aggregate <i>number</i></a>
<b>Tree</b>	<a href="#">queued-bytes-aggregate</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### datapath

<b>Description</b>	Container for monitoring datapath resources of a particular forwarding complex
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword datapath</a>
<b>Tree</b>	<a href="#">datapath</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**asic**

<b>Description</b>	Container for monitoring ASIC-specific datapath resources
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic</a>
<b>Tree</b>	<a href="#">asic</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**resource** [name identityref](#)

<b>Description</b>	List of ASIC-specific datapath resources.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** [identityref](#)

<b>Description</b>	The name of the ASIC-specific datapath resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ip-lpm-ipv4-routes IPv4 longest prefix match route resources 7220 D1/D2/D3: Reports the number of IPv4 entries in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of half-wide entries in all partitions (i.e. it assumes no IPv6 routes consume those entries). In ALPM mode, free entries is the Minimum Guaranteed Capacity returned by the BCM SDK. 7220 D4/D5 and 7220 H2/H3/H4: Reports the number of IPv4 routes installed in the FIB. Free entries is the Minimum Guaranteed Capacity returned by the BCM SDK.</li> <li>ip-lpm-ipv6-routes IPv6 longest prefix match route resources Reports the number of IPv6 routes installed in the FIB. Free entries is the Minimum Guaranteed Capacity returned by the BCM SDK.</li> <li>ip-lpm-ipv6-shorter-routes</li> </ul>

IPv6 longest prefix match route resources when the prefix length is less than or equal to 64

7220 D1/D2/D3: Reports the number of IPv6 entries with prefix length less than 65 bits in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of single-wide + double-wide entries (i.e. it assumes no other types of routes consume those entries). In ALPM mode, free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

7220 H2/H3: Reports the number of IPv6 entries with prefix length less than 65 bits installed in the FIB. Free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

- ip-lpm-ipv6-longer-routes

IPv6 longest prefix match route resources when the prefix length is greater than 64

7220 D1/D2/D3: Reports the number of IPv6 entries with prefix length greater than 64 bits in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of double-wide entries (i.e. it assumes no other types of routes consume those entries). In ALPM mode, free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

7220 H2/H3: Reports the number of IPv6 entries with prefix length greater than 64 bits installed in the FIB. Free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

- exact-match-entries

IP exact match lookup table resources

Reports the number of half-wide entries used in the LEM table. Each MPLS ILM record uses one half-wide entry. Each IPv4 address used as a host route, ARP entry or subnet broadcast address requires a half-wide entry. An IPv6 address used as a host route, or ND entry requires a single-wide entry (2 half-wide entries). Free entries is the remaining number of half-wide entries.

- ip-tunnel-source-ipv4-addresses

IP tunnel source IPv4 address resources

Each IPinIP and GRE tunnel with a different source IPv4 address uses one of these resources.

- ip-tunnel-source-ipv6-addresses

IP tunnel source IPv6 address resources

Each IPinIP and GRE tunnel with a different source IPv6 address uses one of these resources.

- underlay-ecmp-groups

Underlay ECMP group resources

ECMP groups are partitioned into overlay and underlay groups. The underlay partition is further subdivided into groups used for underlay

ECMP and groups used for VP LAGs (EVPN M-H). This counts the utilization of the sub-resource used for ECMP.

- vp-lag-groups

VP LAG group resources

ECMP groups are partitioned into overlay and underlay groups. The underlay partition is further subdivided into groups used for underlay ECMP and groups used for VP LAGs (EVPN M-H). This counts the utilization of the sub-resource used for VP LAGs.

- overlay-ecmp-groups

Overlay ECMP group resources

ECMP groups are partitioned into overlay and underlay groups. This counts the utilization of the overlay ECMP partition.

- underlay-ecmp-members

Underlay ECMP member resources

ECMP members are partitioned into overlay and underlay. This counts the utilization of the partition used for underlay.

- overlay-ecmp-members

Overlay ECMP member resources

ECMP members are partitioned into overlay and underlay. This counts the utilization of the partition used for overlay.

- underlay-egress-next-hops

Underlay egress next-hop resources

Egress next-hops are partitioned into overlay and underlay. This counts the utilization of the partition used for underlay.

- overlay-egress-next-hops

Overlay egress next-hop resources

Egress next-hops are partitioned into overlay and underlay. This counts the utilization of the partition used for overlay.

- dgpp-module-ids

DGPP module ID resources

DGPPs are an aggregate id consisting of a module\_id and a port\_id. There are 64 modules and 120 ports per module. Each 'network' ARP entry (IP next-hop) needs a DGPP - the module\_id is allocated against the network interface (port) and a port\_id is allocated from within the module. A module\_id will only be allocated when the first ArpEntry is added (freed when last is removed) but is owned exclusively by that network interface. A network interface may require more than one module\_id - i.e. if there are 245 ArpEntries on ethernet-1/1 (possibly spread across multiple network-instance interfaces) then 3 module\_ids are required.

- egress-vlan-translate-egress-vnis

EGR\_VLAN\_XLATE\_1 resources

Corresponds to the 'EGR\_VLAN\_XLATE\_1' HW table (8K entries). These entries are used for finding the egress VNI to be used for VXLAN packets.

- egress-vlan-translate-local-bias-pairs

EGR\_VLAN\_XLATE\_2 resources

Corresponds to the 'EGR\_VLAN\_XLATE\_2' HW table (24K entries). These entries are used for local bias (ES pruning).

- level-1-ecmp-groups

Level 1 (top level) ECMP group resources.

- level-2-ecmp-groups

Level 2 (middle level) ECMP group resources.

- level-3-ecmp-groups

Level 3 (bottom level) ECMP group resources.

- level-1-ecmp-members

Level 1 (top level) ECMP member resources.

- level-2-ecmp-members

Level 2 (middle level) ECMP member resources.

- level-3-ecmp-members

Level 3 (bottom level) ECMP member resources.

- level-1-non-ecmp-fecs

Level 1 (top level) non-ECMP FEC resources.

- level-2-non-ecmp-fecs

Level 2 (middle level) non-ECMP FEC resources.

- level-3-non-ecmp-fecs

Level 3 (bottom level) non-ECMP FEC resources.

- decap-next-hop-statistics

Statistics resources for counting packets matching a tunnel termination entry and then forwarded to a next-hop

One resource is one packet/octet counter pair that is allocated to counting each case where packets: (a) match a gRIBI-programmed tunnel termination entry and get forwarded to a next-hop that does redirect to another network-instance (1 counter pair for all redirect targets) (b) match a gRIBI-programmed tunnel termination entry and get forwarded to a next-hop that does IP-in-IP encapsulation towards a new endpoint address (1 counter pair per new endpoint address)

- subinterface-basic-stats-counters

Stats resources used by bridged and routed (non-IRB) subinterfaces that do not provide a breakdown by protocol family

- subinterface-detailed-stats-counters

Stats resources used by routed (non-IRB) subinterfaces that provide a breakdown by protocol family

- subinterface-irb-stats-counters

Stats resources used by routed IRB subinterfaces

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **free-entries** *number*

<b>Description</b>	The number of entries that are currently free
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic resource name identityref free-entries number</a>
<b>Tree</b>	<a href="#">free-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **used-entries** *number*

<b>Description</b>	The number of entries that are currently used
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic resource name identityref used-entries number</a>
<b>Tree</b>	<a href="#">used-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **used-high-watermark** *number*

<b>Description</b>	A watermark of highest number of entries used for this resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath asic resource name identityref used-high-watermark number</a>
<b>Tree</b>	<a href="#">used-high-watermark</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**used-last-high-watermark-time** *string*

<b>Description</b>	The timestamp when the high-watermark was last updated
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">datapath</a> <a href="#">asic resource name</a> <i>identityref</i> <a href="#">used-last-high-watermark-time</a> <i>string</i>
<b>Tree</b>	<a href="#">used-last-high-watermark-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**used-percent** *number*

<b>Description</b>	The percentage of the resource that is currently used
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">datapath</a> <a href="#">asic resource name</a> <i>identityref</i> <a href="#">used-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">used-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**used-upper-threshold-exceeded** *boolean*

<b>Description</b>	This value is set to true when the used percentage value ( $\text{used} / (\text{used} + \text{free}) * 100$ ) has reached (in a rising direction) the configured upper-threshold-set for this resource and false when the used percentage value has reached (in a falling direction) the configured upper-threshold-clear for this resource
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">datapath</a> <a href="#">asic resource name</a> <i>identityref</i> <a href="#">used-upper-threshold-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-upper-threshold-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**xdp**

<b>Description</b>	Container for monitoring datapath resources that are generic in concept.
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<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword datapath xdp</a>
<b>Tree</b>	<a href="#">xdp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### resource [name identityref](#)

<b>Description</b>	List of generic datapath resources.
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword datapath xdp resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### name [identityref](#)

<b>Description</b>	The name of the XDP datapath resource
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword datapath xdp resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>arp-nd-entries IPv4 ARP and IPv6 neighbor discovery resources Each IPv4 ARP and each IPv6 neighbor entry counts as 1 used resource against a total that is platform dependent.</li> <li>ip-hosts IP host route resources 7220 D1/D2/D3: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every IPv4 multicast snoop entry requires 2 entries. In non-ALPM operation every remote /32 route also requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every IPv6 multicast snoop entry requires 4 entries. In non-ALPM operation every remote /128 route also requires 2 entries. Free entries reflects the total number of entries remaining in shared + dedicated UFT banks. 7220 D4/D5: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every (*, G) IPv4 multicast snoop entry requires 1 entry. Every (S, G) IPv4 multicast snoop entry requires 2 entries. Every (*, G) IPv6 multicast snoop entry requires 2 entries. Every (S, G) IPv6 multicast snoop entry requires 4 entries.</li> </ul>



7220 H2/H3/H4: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries.

- ip-lpm-routes

IP longest prefix match route resources

7250 IXR/IXRe: Every installed IPv4 and IPv6 route counts as one used route.

7220 D1/D2/D3: In ALPM-disabled mode: Reports the number of half-wide entries. An IPv4 route requires a half-wide entry. An IPv6 route that is /64 or less requires a single-wide entry (2 half-wide entries). An IPv6 route that is more than /64 requires a double-wide entry (4 half-wide entries). In ALPM mode: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 2 used routes.

7220 D4/D5: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 4 used routes.

- mac-addresses

MAC lookup table resources

Reports the number of entries used in the MAC lookup table. On 7220 D1/D2/D3/D4/D5, free entries reflects the total number of entries remaining in shared + dedicated UFT banks

- mac-next-hops

Direct MAC next-hop resources

A resource consumed by every next-hop of a gRIBI route that is specified as an interface name plus MAC address

- direct-ip-next-hops

Direct IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route or MPLS route/tunnel that is resolved directly to a local interface.

- indirect-ip-next-hops

Indirect IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route that requires resolution by a non-local route. This does not consider underlying ASIC resources.

- tunnel-next-hops

Tunnel next-hop resources

Reports the number of tunnel next-hop entries. 1 tunnel next-hop is required every time an indirect next-hop (e.g. a BGP next-hop) is resolved by a tunnel (BGP-LU, LDP, SR-ISIS or VXLAN)

- ecmp-groups

ECMP group resources

7250 IXR/IXRe: Reports the used number of ECMP FECs, adding L1 ECMP FECs, L2 ECMP FECs and L3 ECMP FECs.

7220 D1/D2/D3/D4/D5: Reports the used number of ECMP groups, adding overlay and underlay ECMP groups (if applicable).

7220 H2/H3/H4: Reports used number of ECMP groups.

- **ecmp-members**

ECMP member resources

7250 IXR/IXRe: Reports the used number of ECMP member FECs, adding L1 ECMP member FECs, L2 ECMP member FECs and L3 ECMP member FECs.

7220 D1/D2/D3/D4/D5: Reports the used number of ECMP members, adding overlay and underlay ECMP members (if applicable).

7220 H2/H3/H4: Reports used number of ECMP members.

- **egress-next-hops**

Egress next-hop resources

7220 D2/D3/D4/D5: Reports the number of entries used in the egress next-hop table, counting entries in the overlay partition and entries in the underlay partition. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.

7220 H2/H3/H4: Reports the number of entries used in the egress next-hop table. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.

- **lag-groups**

LAG group resources

Reports the number of LAG resources used, including DGPP LAGs.

- **lag-members**

LAG member resources

Reports the number of LAG member resources used, including DGPP LAG members.

- **subinterfaces**

Subinterface resources

There are a maximum of 127 subinterfaces per TH3 pipeline (limited by VFP/EFP TCAM resources). This counts the utilization of those resources.

- **mpls-next-hops**

MPLS next-hop (NHLFE) resources

One resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an ILM entry that performs a 'swap'. One additional resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an MPLS tunnel.

- **mpls-incoming-labels**

MPLS label lookup (ILM) resources

One resource is used for every MPLS ILM entry that performs either a 'swap' or a 'pop' operation.

- originating-tunnels

Originating tunnel resources

One resource is used for every VXLAN, LDP, SR-ISIS or IPinIP tunnel originating on this node as head-end. On TD3 and TD4 systems this equates to a DVP resource.

- terminating-tunnels

Terminating tunnel resources

One resource is used for every IPinIP tunnel terminating entry on this node.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **free-entries** *number*

<b>Description</b>	The number of entries that are currently free
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath xdp resource name identityref free-entries number</a>
<b>Tree</b>	<a href="#">free-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **used-entries** *number*

<b>Description</b>	The number of entries that are currently used
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath xdp resource name identityref used-entries number</a>
<b>Tree</b>	<a href="#">used-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **used-high-watermark** *number*

<b>Description</b>	A watermark of highest number of entries used for this resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword datapath xdp resource name identityref used-high-watermark number</a>

<b>Tree</b>	<a href="#">used-high-watermark</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **used-last-high-watermark-time** *string*

<b>Description</b>	The timestamp when the high-watermark was last updated
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">datapath</a> <a href="#">xdp resource name</a> <a href="#">identityref</a> <a href="#">used-last-high-watermark-time</a> <i>string</i>
<b>Tree</b>	<a href="#">used-last-high-watermark-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **used-percent** *number*

<b>Description</b>	The percentage of the resource that is currently used
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">datapath</a> <a href="#">xdp resource name</a> <a href="#">identityref</a> <a href="#">used-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">used-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **used-upper-threshold-exceeded** *boolean*

<b>Description</b>	This value is set to true when the used percentage value ( $\text{used} / (\text{used} + \text{free}) * 100$ ) has reached (in a rising direction) the configured upper-threshold-set for this resource and false when the used percentage value has reached (in a falling direction) the configured upper-threshold-clear for this resource
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">datapath</a> <a href="#">xdp resource name</a> <a href="#">identityref</a> <a href="#">used-upper-threshold-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-upper-threshold-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## drop-counters

<b>Description</b>	State container for forwarding-complex drop counters
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">drop-counters</a>
<b>Tree</b>	<a href="#">drop-counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## adverse-aggregate *number*

<b>Description</b>	<p>Aggregation of all counters incremented when packets are dropped unexpectedly</p> <p>This leaf counts packet discarded as result of corrupted programming state or data structures in the forwarding-complex integrated circuit.</p> <p>Note: corrupted packets received on ingress interfaces are not counted in this leaf. This is because incoming corrupted packets are not a signal of adverse state within the integrated circuit, but rather of an adjacent entity, such as a cable or transceiver.</p>
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">drop-counters adverse-aggregate number</a>
<b>Tree</b>	<a href="#">adverse-aggregate</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## congestion-aggregate *number*

<b>Description</b>	Aggregation of all counters incremented when packets are dropped because the aggregate ingress traffic rate exceeds internal performance limits of the integrated circuit
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">drop-counters congestion-aggregate number</a>
<b>Tree</b>	<a href="#">congestion-aggregate</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **no-route** *number*

**Description** Aggregation of all counters incremented when packets are dropped due to no FIB entry for an IPv4 or IPv6 packet

This counter and the packet-processing-aggregate counter should be incremented for each no-route packet drop.

**Context** [platform linecard slot](#) *number* [forwarding-complex name](#) *keyword* [drop-counters no-route](#) *number*

**Tree** [no-route](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **packet-processing-aggregate** *number*

**Description** Aggregation of all counters incremented when packets are dropped due to legitimate programming decisions

This is derived by summing: \* subinterface-level in-discarded counters (counts FIB lookup failures, packets dropped due to ACL drop action, packets dropped due to TTL expiry) \* subinterface-level out-error counters (packets dropped due to IP MTU exceeded) \* port-level out-error counters (packets dropped due to port MTU exceeded) \* port-level in-error counters (packets dropped due to MRU exceeded or packet CRC error)

**Context** [platform linecard slot](#) *number* [forwarding-complex name](#) *keyword* [drop-counters packet-processing-aggregate](#) *number*

**Tree** [packet-processing-aggregate](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **fabric**

**Description** Top-level container for fabric configuration and state

**Context** [platform linecard slot](#) *number* [forwarding-complex name](#) *keyword* [fabric](#)

<b>Tree</b>	<a href="#">fabric</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **availability number**

<b>Description</b>	Details the percentage bandwidth available to the fabric for the line card
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fabric availability number</a>
<b>Tree</b>	<a href="#">availability</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **consumed-capacity number**

<b>Description</b>	Backplane-facing capacity that is consumed by front-panel ports that are connected to the integrated circuit and are operationally up
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fabric consumed-capacity number</a>
<b>Tree</b>	<a href="#">consumed-capacity</a>
<b>Units</b>	bits per second
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **operational-capacity number**

<b>Description</b>	Total backplane-facing capacity that is currently available based on the active links
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fabric operational-capacity number</a>
<b>Tree</b>	<a href="#">operational-capacity</a>
<b>Units</b>	bits per second
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-capacity number**

**Description** Total backplane-facing capacity that is available in the presence of no link failures or degradation

**Context** [platform linecard slot number forwarding-complex name keyword fabric total-capacity number](#)

**Tree** [total-capacity](#)

**Units** bits per second

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **utilization-egress number**

**Description** Provides the linecard bandwidth utilization from the switch fabric

**Context** [platform linecard slot number forwarding-complex name keyword fabric utilization-egress number](#)

**Tree** [utilization-egress](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **utilization-ingress number**

**Description** Provides the linecard bandwidth utilization into the switch fabric

**Context** [platform linecard slot number forwarding-complex name keyword fabric utilization-ingress number](#)

**Tree** [utilization-ingress](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e



**fib-table**

<b>Description</b>	Enter the fib-table context
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table</a>
<b>Tree</b>	<a href="#">fib-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop-group *index number***

<b>Description</b>	List of next hop groups (NHGs) in the FIB table
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table next-hop-group <i>index number</i></a>
<b>Tree</b>	<a href="#">next-hop-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

***index number***

<b>Description</b>	A system-wide unique identifier of a next-hop-group
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table next-hop-group <i>index number</i></a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-active *boolean***

<b>Description</b>	When true, this NHG is not being used to forward traffic and its backup NHG is being relied upon to provide reachability
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table next-hop-group <i>index number</i> backup-active <i>boolean</i></a>
<b>Tree</b>	<a href="#">backup-active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**backup-next-hop-group** *reference*

<b>Description</b>	The backup next-hop-group for the current group. When all entries within the next-hop group become unusable, the backup next-hop group is used if specified.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fib-table next-hop-group index number backup-next-hop-group reference</a>
<b>Tree</b>	<a href="#">backup-next-hop-group</a>
<b>Reference</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fib-table next-hop-group index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop id** *number*

<b>Description</b>	Enter the next-hop list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fib-table next-hop-group index number next-hop id number</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	Index of the next-hop within the NHG
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fib-table next-hop-group index number next-hop id number</a>
<b>Range</b>	0 to 1023
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**next-hop** *number*

<b>Description</b>	The system-wide unique identifier of the next-hop object
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword fib-table next-hop-group index number next-hop id number next-hop number</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **oper-state** *keyword*

**Description** Operational state of the next-hop member

**Context** [platform](#) [linecard slot number](#) [forwarding-complex name keyword](#) [fib-table next-hop-group index number](#) [next-hop id number](#) [oper-state keyword](#)

**Tree** [oper-state](#)

**Options**

- up  
The NHG or NH is fully resolved and operational
- down  
The NHG or NH is unresolved and not viable for carrying traffic
- failed  
The NHG or NH is not operational because of an underlying hardware resource issue
- up-unused  
The NH is up and resolved but not used for carrying traffic, possibly because of resilient-hash-prefix configuration

**Configurable** False

**Platforms** Supported on all platforms

### **oper-state** *keyword*

**Description** Operational state of the next-hop group

**Context** [platform](#) [linecard slot number](#) [forwarding-complex name keyword](#) [fib-table next-hop-group index number](#) [oper-state keyword](#)

**Tree** [oper-state](#)

**Options**

- up  
The NHG or NH is fully resolved and operational
- down  
The NHG or NH is unresolved and not viable for carrying traffic
- failed  
The NHG or NH is not operational because of an underlying hardware resource issue
- up-unused  
The NH is up and resolved but not used for carrying traffic, possibly because of resilient-hash-prefix configuration

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## programming-progress

<b>Description</b>	State that shows the FIB programming progress of the forwarding complex
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table programming-progress</a>
<b>Tree</b>	<a href="#">programming-progress</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip-routes

<b>Description</b>	Container for the FIB programming state of IP route entries
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table programming-progress ip-routes</a>
<b>Tree</b>	<a href="#">ip-routes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entries-remaining-to-add *number*

<b>Description</b>	The number of entries that need to be created in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword fib-table programming-progress ip-routes entries-remaining-to-add <i>number</i></a>
<b>Tree</b>	<a href="#">entries-remaining-to-add</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entries-remaining-to-modify** *number*

<b>Description</b>	The number of entries that need to be modified in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress ip-routes entries-remaining-to-modify</a> <i>number</i>
<b>Tree</b>	<a href="#">entries-remaining-to-modify</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-sync-time** *string*

<b>Description</b>	The time when the forwarding complex last reached sync with the control plane  A linecard reaches sync when both entries-remaining-to-add and entries-remaining-to-modify reach zero
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress ip-routes last-sync-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-sync-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop-groups**

<b>Description</b>	Container for the FIB programming state of next-hop-group (NHG) entries
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress next-hop-groups</a>
<b>Tree</b>	<a href="#">next-hop-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entries-remaining-to-add** *number*

<b>Description</b>	The number of entries that need to be created in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress next-hop-groups entries-remaining-to-add</a> <i>number</i>
<b>Tree</b>	<a href="#">entries-remaining-to-add</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entries-remaining-to-modify** *number*

<b>Description</b>	The number of entries that need to be modified in order to reach synchronization with the CPM
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress next-hop-groups entries-remaining-to-modify</a> <i>number</i>
<b>Tree</b>	<a href="#">entries-remaining-to-modify</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-sync-time** *string*

<b>Description</b>	The time when the forwarding complex last reached sync with the control plane  A linecard reaches sync when both entries-remaining-to-add and entries-remaining-to-modify reach zero
<b>Context</b>	<a href="#">platform linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">fib-table programming-progress next-hop-groups last-sync-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-sync-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interfaces *string*

<b>Description</b>	List of interfaces that belong to this forwarding complex
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">interfaces string</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>String Length</b>	3 to 20
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-booted *string*

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">last-booted string</a>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### last-booted-reason *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">last-booted-reason identityref</a>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated-reboot A user initiated the reboot directly via a management interface</li> <li>• power-failure The system rebooted the component due to insufficient power</li> <li>• critical-error</li> </ul>

The system rebooted the component due to an internal critical error

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **mtu**

<b>Description</b>	Enter the mtu context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword mtu</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **resource** [name](#) *identityref*

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword mtu resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **name** *identityref*

<b>Description</b>	The name of the MTU resource
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<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword mtu resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ip-mtu IP MTU resource pool. One resource from this pool is consumed by every different IP MTU value used by the subinterfaces on the linecard forwarding-complex.</li> <li>• port-mtu Port MTU resource pool. One resource from this pool is consumed by every different port MTU value used by a port on the linecard forwarding-complex.</li> <li>• mpls-mtu MPLS MTU resource pool. One resource from this pool is consumed by every different MPLS MTU value used by the subinterfaces on the linecard forwarding-complex.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
 <b>free <i>number</i></b>	
<b>Description</b>	The number of resources that are unused and available
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword mtu resource name identityref free number</a>
<b>Tree</b>	<a href="#">free</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
 <b>used <i>number</i></b>	
<b>Description</b>	The number of resources that are in use
<b>Context</b>	<a href="#">platform linecard slot <i>number</i> forwarding-complex name keyword mtu resource name identityref used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting</li></ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## p4rt

<b>Description</b>	Top-level container for P4Runtime forwarding complex configuration and state
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword p4rt</a>
<b>Tree</b>	<a href="#">p4rt</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## id number

<b>Description</b>	The numeric ID used by the controller to address the forwarding complex This ID may be referred to as a 'device', 'node' or 'target' by the P4RT specification. Each ASIC is addressed by the client based on this numeric identifier.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword p4rt id number</a>
<b>Tree</b>	<a href="#">id</a>
<b>Range</b>	1 to 18446744073709551615
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## part-number string

<b>Description</b>	Part number for this component
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword part-number string</a>
<b>Tree</b>	<a href="#">part-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pipeline index** (*number* | *keyword*)

<b>Description</b>	List of pipelines that make up one forwarding complex.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword)</a>
<b>Tree</b>	<a href="#">pipeline</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**index** (*number* | *keyword*)

<b>Description</b>	The pipeline number (TH3 systems) or direction (J2 and J2C+ systems).
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword)</a>
<b>Range</b>	0 to 7
<b>Options</b>	<ul style="list-style-type: none"> <li>• egress Applicable to J2 and J2C+ systems only</li> <li>• ingress Applicable to J2 and J2C+ systems only</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**datapath**

<b>Description</b>	Container for monitoring datapath resources of a particular pipeline
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword) datapath</a>
<b>Tree</b>	<a href="#">datapath</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**xdp**

<b>Description</b>	Container for monitoring datapath resources that are generic in concept.
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At the pipeline level only one XDP resource is currently reported:

<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword) datapath xdp</a>
<b>Tree</b>	<a href="#">xdp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### resource [name identityref](#)

<b>Description</b>	List of generic datapath resources.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword) datapath xdp resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### name [identityref](#)

<b>Description</b>	The name of the XDP datapath resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword pipeline index (number   keyword) datapath xdp resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>arp-nd-entries           <p>IPv4 ARP and IPv6 neighbor discovery resources</p> <p>Each IPv4 ARP and each IPv6 neighbor entry counts as 1 used resource against a total that is platform dependent.</p> </li> <li>ip-hosts           <p>IP host route resources</p> <p>7220 D1/D2/D3: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every IPv4 multicast snoop entry requires 2 entries. In non-ALPM operation every remote /32 route also requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every IPv6 multicast snoop entry requires 4 entries. In non-ALPM operation every remote /128 route also requires 2 entries. Free entries reflects the total number of entries remaining in shared + dedicated UFT banks.</p> <p>7220 D4/D5: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every (*, G) IPv4 multicast snoop entry requires 1 entry. Every</p> </li> </ul>

(S, G) IPv4 multicast snoop entry requires 2 entries. Every (\*, G) IPv6 multicast snoop entry requires 2 entries. Every (S, G) IPv6 multicast snoop entry requires 4 entries.

7220 H2/H3/H4: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries.

- ip-lpm-routes

IP longest prefix match route resources

7250 IXR/IXRe: Every installed IPv4 and IPv6 route counts as one used route.

7220 D1/D2/D3: In ALPM-disabled mode: Reports the number of half-wide entries. An IPv4 route requires a half-wide entry. An IPv6 route that is /64 or less requires a single-wide entry (2 half-wide entries). An IPv6 route that is more than /64 requires a double-wide entry (4 half-wide entries). In ALPM mode: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 2 used routes.

7220 D4/D5: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 4 used routes.

- mac-addresses

MAC lookup table resources

Reports the number of entries used in the MAC lookup table. On 7220 D1/D2/D3/D4/D5, free entries reflects the total number of entries remaining in shared + dedicated UFT banks

- mac-next-hops

Direct MAC next-hop resources

A resource consumed by every next-hop of a gRIBI route that is specified as an interface name plus MAC address

- direct-ip-next-hops

Direct IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route or MPLS route/tunnel that is resolved directly to a local interface.

- indirect-ip-next-hops

Indirect IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route that requires resolution by a non-local route. This does not consider underlying ASIC resources.

- tunnel-next-hops

Tunnel next-hop resources

Reports the number of tunnel next-hop entries. 1 tunnel next-hop is required every time an indirect next-hop (e.g. a BGP next-hop) is resolved by a tunnel (BGP-LU, LDP, SR-ISIS or VXLAN)

- **ecmp-groups**  
ECMP group resources  
7250 IXR/IXRe: Reports the used number of ECMP FECs, adding L1 ECMP FECs, L2 ECMP FECs and L3 ECMP FECs.  
7220 D1/D2/D3/D4/D5: Reports the used number of ECMP groups, adding overlay and underlay ECMP groups (if applicable).  
7220 H2/H3/H4: Reports used number of ECMP groups.
- **ecmp-members**  
ECMP member resources  
7250 IXR/IXRe: Reports the used number of ECMP member FECs, adding L1 ECMP member FECs, L2 ECMP member FECs and L3 ECMP member FECs.  
7220 D1/D2/D3/D4/D5: Reports the used number of ECMP members, adding overlay and underlay ECMP members (if applicable).  
7220 H2/H3/H4: Reports used number of ECMP members.
- **egress-next-hops**  
Egress next-hop resources  
7220 D2/D3/D4/D5: Reports the number of entries used in the egress next-hop table, counting entries in the overlay partition and entries in the underlay partition. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.  
7220 H2/H3/H4: Reports the number of entries used in the egress next-hop table. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.
- **lag-groups**  
LAG group resources  
Reports the number of LAG resources used, including DGPP LAGs.
- **lag-members**  
LAG member resources  
Reports the number of LAG member resources used, including DGPP LAG members.
- **subinterfaces**  
Subinterface resources  
There are a maximum of 127 subinterfaces per TH3 pipeline (limited by VFP/EFP TCAM resources). This counts the utilization of those resources.
- **mpls-next-hops**  
MPLS next-hop (NHLFE) resources  
One resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an ILM entry that performs a 'swap'. One additional resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an MPLS tunnel.

- **mpls-incoming-labels**  
MPLS label lookup (ILM) resources  
One resource is used for every MPLS ILM entry that performs either a 'swap' or a 'pop' operation.
- **originating-tunnels**  
Originating tunnel resources  
One resource is used for every VXLAN, LDP, SR-ISIS or IPinIP tunnel originating on this node as head-end. On TD3 and TD4 systems this equates to a DVP resource.
- **terminating-tunnels**  
Terminating tunnel resources  
One resource is used for every IPinIP tunnel terminating entry on this node.

**Configurable**

False

**Platforms**

7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**free-entries** *number***Description**

The number of entries that are currently free

**Context**[platform linecard slot number forwarding-complex name keyword pipeline index \(number | keyword\) datapath xdp resource name identityref free-entries number](#)**Tree**[free-entries](#)**Configurable**

False

**Platforms**

7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**used-entries** *number***Description**

The number of entries that are currently used

**Context**[platform linecard slot number forwarding-complex name keyword pipeline index \(number | keyword\) datapath xdp resource name identityref used-entries number](#)**Tree**[used-entries](#)**Configurable**

False

**Platforms**

7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**used-percent** *number*

<b>Description</b>	The percentage of the resource that is currently used
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">pipeline index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">datapath xdp resource name</a> <i>identityref</i> <a href="#">used-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">used-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pipeline-counters**

<b>Description</b>	Top-level container for the packet counters associated with the different NPU sub-blocks.
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">pipeline index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a>
<b>Tree</b>	<a href="#">pipeline-counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**host-interface-block**

<b>Description</b>	The ASIC host interface block subsystem that connects the NPU to the host CPU (on the CPM)
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <i>number</i> <a href="#">forwarding-complex name</a> <i>keyword</i> <a href="#">pipeline index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a>
<b>Tree</b>	<a href="#">host-interface-block</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**packet-extraction**

<b>Description</b>	Packet extraction from the NPU towards the CPU
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<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">pipeline index (number   keyword)</a> <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a>
<b>Tree</b>	<a href="#">packet-extraction</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **extracted-octets** *number*

<b>Description</b>	The number of octets in Ethernet frames extracted towards the CPU from the pipeline; this includes packets that might be dropped (due to congestion or rate limiting) before reaching the final consuming application on the CPM
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">pipeline index (number   keyword)</a> <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extracted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">extracted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **extracted-packets** *number*

<b>Description</b>	The number of Ethernet frames extracted towards the CPU from the pipeline; this includes packets that might be dropped (due to congestion or rate limiting) before reaching the final consuming application on the CPM
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot number</a> <a href="#">forwarding-complex name</a> <a href="#">keyword</a> <a href="#">pipeline index (number   keyword)</a> <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extracted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">extracted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **extraction-reason** [reason](#) *identityref*

<b>Description</b>	List of extraction reasons that are possible for the pipeline
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<b>Context</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i> <a href="#">forwarding-complex</a> <a href="#">name</a> <i>keyword</i> <a href="#">pipeline</a> <a href="#">index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extraction-reason</a> <a href="#">reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">extraction-reason</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## **reason** *identityref*

<b>Description</b>	A reason for extracting the packet towards the host CPU
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i> <a href="#">forwarding-complex</a> <a href="#">name</a> <i>keyword</i> <a href="#">pipeline</a> <a href="#">index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extraction-reason</a> <a href="#">reason</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-header-options</a> IPv4 header options are present in the packet.</li> <li>• <a href="#">ipv6-hop-by-hop-option</a> IPv6 packet with topmost next-header value of zero.</li> <li>• <a href="#">icmp</a> ICMPv4 packets with this router as destination.</li> <li>• <a href="#">icmp6</a> ICMPv6 packets including neighbor-solicitation and neighbor-advertisement messages.</li> <li>• <a href="#">icmp-redirect</a> Received IPv4 and IPv6 packets that should cause an ICMP redirect to be generated.</li> <li>• <a href="#">bfd</a> BFD and micro-BFD packets with this router as destination.</li> <li>• <a href="#">bgp</a> BGP packets; TCP port 179.</li> <li>• <a href="#">grpc</a> GRPC packets; TCP port 57400</li> <li>• <a href="#">ospf</a> OSPF packets; IP protocol 89</li> <li>• <a href="#">vrrp</a> VRRP packets; IP protocol 112</li> <li>• <a href="#">ldp</a> LDP packets; UDP port 646</li> </ul>

- dhcp  
DHCP packets; UDP ports 67,68
- ip-other-terminating  
Any other IP packets that are locally destined
- ip-blackhole-icmp  
Traffic matched a blackhole route with generate-icmp=true
- ipv6-multicast  
IPv6 DA = FF01:0:0:0:0:0:1 or IPv6 DA = FF01:0:0:0:0:0:2
- ipv6-link-local  
IPv6 DA = FE80::/10 address
- ipv4-broadcast  
IPv4 packets were received with a subnet broadcast address or a limited broadcast and not recognized as another type
- ip-no-route  
IPv4 and IPv6 packets for which there was no route to the destination
- ip-header-errors  
IP version error, IP header checksum error, IP header length error, IP header total length error, IPv6 next-header is null, IPv6 SA is link-local while IPv6 DA is global
- ip-ttl-expired  
The IP packet is not destined for this router and it was received with TTL 0 or TTL 1
- mpls-ttl-expired  
The MPLS packet was received with MPLS label stack TTL 0 or TTL 1
- ip-arp-miss  
The IP DA itself or the next-hop of the route used to forward the packet has no ARP/IPv6 neighbor entry
- ip-arp  
The received frame is an ARP packet recognized by ethertype 0x0806
- lldp  
The received frame is an LLDP packet recognized by ethertype 0x88cc
- isis  
The received frame is an ISIS packet
- lacp  
The received frame is an LACP packet
- google-discovery  
The received frame is a GDP packet recognized by ethertype 0x6007
- capture-filter-copy

- Packets matching a capture-filter copy rule
- `cpm-filter-log`  
Packets matching a CPM-filter rule with log action
- `ingress-acl-log`  
Packets matching an interface IP filter rule with log action
- `egress-acl-log`  
Packet matched an egress ACL rule with log action.
- `ip-mpls-mtu-exceeded`  
The egress subinterface IP MTU or MPLS MTU (as applicable) is less than the size of the IP or MPLS packet that needs to be transmitted.

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **extracted-octets** *number*

<b>Description</b>	The number of octets in Ethernet frames extracted towards the CPU from the pipeline; this includes packets that might be dropped (due to congestion or rate limiting) before reaching the final consuming application on the CPM
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i> <a href="#">forwarding-complex</a> <a href="#">name</a> <a href="#">keyword</a> <a href="#">pipeline</a> <a href="#">index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extraction-reason</a> <a href="#">reason</a> <a href="#">identityref</a> <a href="#">extracted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">extracted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **extracted-packets** *number*

<b>Description</b>	The number of Ethernet frames extracted towards the CPU from the pipeline; this includes packets that might be dropped (due to congestion or rate limiting) before reaching the final consuming application on the CPM
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard</a> <a href="#">slot</a> <i>number</i> <a href="#">forwarding-complex</a> <a href="#">name</a> <a href="#">keyword</a> <a href="#">pipeline</a> <a href="#">index</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">pipeline-counters</a> <a href="#">host-interface-block</a> <a href="#">packet-extraction</a> <a href="#">extraction-reason</a> <a href="#">reason</a> <a href="#">identityref</a> <a href="#">extracted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">extracted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## qos

**Description** Enter the qos context

**Context** [platform linecard slot number forwarding-complex name keyword qos](#)

**Tree** [qos](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## resource [name identityref](#)

**Description** Enter the resource list instance

**Context** [platform linecard slot number forwarding-complex name keyword qos resource name identityref](#)

**Tree** [resource](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name [identityref](#)

**Description** The name of the QoS resource

**Context** [platform linecard slot number forwarding-complex name keyword qos resource name identityref](#)

**Options**

- classifier-profiles
 

A classifier-profile resource is used every time a different combination of IPv4 DSCP classifier and IPv6 DSCP classifier is applied to an ingress subinterface. One is always used by the combination of the default IPv4 DSCP classifier and the default IPv6 DSCP classifier.
- rewrite-profiles
 

A rewrite-profile resource is used every time a different combination of IPv4 DSCP rewrite-rule and IPv6 DSCP rewrite-rule is applied to an egress subinterface.
- dscp-classifier-policies

Every user-defined DSCP classifier policy that is configured uses one of these resources

- dscp-mpls-rewrite-policies

A rewrite-policy resource is used every time a different DSCP or MPLS traffic-class rewrite-rule policy is applied to an egress subinterface.

- dscp-rewrite-policies

Every user-defined dscp rewrite policy that is configured uses one of these resources.

- dot1p-classifier-policies

Every user-defined dot1p classifier policy that is configured uses one of these resources

- dot1p-rewrite-policies

Every user-defined dot1p rewrite policy that is configured uses one of these resources

- input-policers

Every input-policer that is allocated to the configured subinterfaces based on input-class-map

- output-class-maps

Every user-defined output class map that is configured uses one of these resources.

#### Configurable

False

#### Platforms

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### free number

#### Description

The number of resources that are unused and available

#### Context

[platform](#) [linecard slot number forwarding-complex name](#) [keyword qos resource name](#) [identityref free number](#)

#### Tree

[free](#)

#### Configurable

False

#### Platforms

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### used number

#### Description

The number of resources that are in use

<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource name identityref used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### resource-set-pool [index number](#)

<b>Description</b>	Enter the resource-set-pool list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number</a>
<b>Tree</b>	<a href="#">resource-set-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### [index number](#)

<b>Description</b>	Resource-set-pool resources for the given forwarding-complex Contains resource-group resources.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number</a>
<b>Range</b>	0 to 1
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-group-resource-pool [index number](#)

<b>Description</b>	Interface-group-resource-pool resources for the given resource-set-pool Contains the resource-groups which have been allocated to this interface-group-resource-pool.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number</a>
<b>Tree</b>	<a href="#">interface-group-resource-pool</a>



<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Enter the index context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**resource-group index number**

<b>Description</b>	Resource-group resources for the given interface-group-resource-pool  Describes the number of resource-sets used and free within the resource-group. A resource-set consists of 16 output-queues, 16 tier-0 queue-schedulers and 1 tier-1 queue-scheduler, which is allocated to every configured subinterface.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number resource-group index number</a>
<b>Tree</b>	<a href="#">resource-group</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Enter the index context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number resource-group index number</a>
<b>Range</b>	0 to 61
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## resource-sets

**Description** Enter the resource-sets context

**Context** [platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number resource-group index number resource-sets](#)

**Tree** [resource-sets](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## free number

**Description** The number of resource-sets that are unused and available

**Context** [platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number resource-group index number resource-sets free number](#)

**Tree** [free](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## used number

**Description** The number of resource-sets that are in use

**Context** [platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number interface-group-resource-pool index number resource-group index number resource-sets used number](#)

**Tree** [used](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**resource-groups**

<b>Description</b>	Enter the resource-groups context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number resource-groups</a>
<b>Tree</b>	<a href="#">resource-groups</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**free number**

<b>Description</b>	The number of resource-groups that are unused and available
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number resource-groups free number</a>
<b>Tree</b>	<a href="#">free</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used number**

<b>Description</b>	The number of resource-groups that are in use
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword qos resource-set-pool index number resource-groups used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**removable boolean**

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword removable boolean</a>
<b>Tree</b>	<a href="#">removable</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## tcam

<b>Description</b>	Enter the tcam context
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam</a>
<b>Tree</b>	<a href="#">tcam</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## resource [name identityref](#)

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## name [identityref](#)

<b>Description</b>	The name of the TCAM resource
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">if-input-ipv4</a> Resource pool of TCAM entries used by IPv4 ACLs applied as subinterface-input filers</li> <li>• <a href="#">if-output-ipv4</a> Resource pool of TCAM entries used by IPv4 ACLs applied as subinterface-output filers</li> <li>• <a href="#">if-input-ipv6</a> Resource pool of TCAM entries used by IPv6 ACLs applied as subinterface-input filers</li> <li>• <a href="#">if-output-ipv6</a> Resource pool of TCAM entries used by IPv6 ACLs applied as subinterface-output filers</li> <li>• <a href="#">cpm-capture-ipv4</a></li> </ul>

- Resource pool of TCAM entries used by IPv4 cpm-filter ACLs and capture-filter ACLs
- cpm-capture-ipv6  
Resource pool of TCAM entries used by IPv6 cpm-filter ACLs and capture-filter ACLs
- system-capture-ipv4  
Resource pool of TCAM entries used by IPv4 capture-filter ACLs and IPv4 system-filter ACLs
- system-capture-ipv6  
Resource pool of TCAM entries used by IPv6 capture-filter ACLs and IPv6 system-filter ACLs
- system-capture  
Resource pool of TCAM entries used by IPv4 + IPv6 capture-filter ACLs and system-filter ACLs
- capture-ipv4  
Resource pool of TCAM entries used by IPv4 capture-filter ACLs
- capture-ipv6  
Resource pool of TCAM entries used by IPv6 capture-filter ACLs
- if-output-cpm-ipv4  
Resource pool of TCAM entries used by IPv4 egress ACLs and cpm-filter ACLs
- if-output-cpm-ipv6  
Resource pool of TCAM entries used by IPv6 egress ACLs and cpm-filter ACLs
- if-output-cpm  
Resource pool of TCAM entries used by IPv4 + IPv6 egress ACLs and cpm-filter ACLs
- if-input-mac  
Resource pool of TCAM entries used by MAC ACLs applied as subinterface-input filters
- if-output-cpm-mac  
Resource pool of TCAM entries used by MAC egress ACLs and MAC cpm-filter ACLs
- policy-forwarding-vrf-selection-ipv4  
Resource pool of TCAM entries used by IPv4 policy-forwarding entries that redirect flows to a different network-instance
- policy-forwarding-nhg-ipv4  
Resource pool of TCAM entries used by IPv4 policy-forwarding entries that redirect flows to a NHG of IP next-hops or tunnels

On TD4 systems IPv6 policy-forwarding entries share this resource with IPv4 entries.

- **policy-forwarding-nhg-ipv6**

Resource pool of TCAM entries used by IPv6 policy-forwarding entries that redirect flows to a NHG of IP next-hops or tunnels

- **if-input-policer**

Resource pool of TCAM entries used by ingress subinterface policer templates

- **if-input-ipv4-qos**

Resource pool of TCAM entries associated with IPv4 multi-field QoS classification entries, when applied to subinterface input

- **if-input-ipv6-qos**

Resource pool of TCAM entries associated with IPv6 multi-field QoS classification entries, when applied to subinterface input

- **mrouter-mfib-redirect**

Resource pool of TCAM entries used by multicast snooping protocols in MAC-VRF network-instances

One TCAM entry is used per multicast snooping protocol enabled in a MAC-VRF. For instance, if igmp-snooping and mld-snooping are enabled on a MAC-VRF, two entries are used. If only igmp-snooping is enabled, only one entry is used.

- **tunnel-decap-ipv4-ipv6**

Resource pool of TCAM entries used for IPv4 and IPv6 tunnel-decapsulation groups

- **if-output-evpn-mh-multicast-non-df**

Resource pool of TCAM entries used by egress filtering of IP multicast traffic to non-Designated Forwarder subinterfaces

One TCAM entry is used when multicast snooping protocols are enabled on at least one MAC-VRF that has one or more subinterfaces associated with Ethernet Segments.

**Configurable**

False

**Platforms**

Supported on all platforms

**free-dynamic number**

**Description**

The number of available and unused TCAM entries for the entry type, assuming that all the remaining unused TCAM slices would be dynamically allocated to this one type of entry (subject to chip level constraints on the placement of double-wide and triple-wide TCAM slice groups).

**Context**

[platform linecard slot number forwarding-complex name keyword tcam resource name identityref free-dynamic number](#)

<b>Tree</b>	<a href="#">free-dynamic</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**free-static number**

<b>Description</b>	The number of available and unused TCAM entries for the entry type, assuming that the number of dynamic TCAM slices that are currently allocated to the entry type remains constant at its current value.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam resource name identityref free-static number</a>
<b>Tree</b>	<a href="#">free-static</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**programmed number**

<b>Description</b>	The number of TCAM entries belonging to this resource that are currently programmed into hardware. When the number of programmed entries equals the number of reserved entries HW programming of this resource type has finished.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam resource name identityref programmed number</a>
<b>Tree</b>	<a href="#">programmed</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**reserved number**

<b>Description</b>	The number of TCAM entries that are currently reserved in this resource pool. Reservation happens when a configuration change is committed. Reserved entries may not be programmed yet if the commit has just occurred.
<b>Context</b>	<a href="#">platform linecard slot number forwarding-complex name keyword tcam resource name identityref reserved number</a>
<b>Tree</b>	<a href="#">reserved</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## healthz

<b>Description</b>	The health of the component  The parameters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.
<b>Context</b>	<a href="#">platform linecard slot number healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-unhealthy string

<b>Description</b>	Last unhealthy time  The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.
<b>Context</b>	<a href="#">platform linecard slot number healthz last-unhealthy string</a>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## status keyword

<b>Description</b>	Health status  The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform linecard slot number healthz status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified</li> </ul>



Unspecified status

The component's health status has not yet been checked by the system.

- healthy

Healthy status

The component is in a healthy state, and is operating within the expected parameters.

- unhealthy

Unhealthy status

The component is in a unhealthy state, it is not performing the function expected of it.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unhealthy-count** *number*

**Description**

Unhealthy count

The number of times the component has transitioned from the healthy state to any other state.

**Context**

[platform linecard slot number healthz unhealthy-count number](#)

**Tree**

[unhealthy-count](#)

**Default**

0

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-booted** *string*

**Description**

The date and time this component last booted

For components that do not boot, this is the time the component was last discovered by the active control module

**Context**

[platform linecard slot number last-booted string](#)

**Tree**

[last-booted](#)

**String Length**

20 to 32

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-booted-reason** *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform linecard slot number last-booted-reason identityref</a>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• user-initiated-reboot A user initiated the reboot directly via a management interface</li> <li>• power-failure The system rebooted the component due to insufficient power</li> <li>• critical-error The system rebooted the component due to an internal critical error</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform linecard slot number last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **locator-state** *keyword*

<b>Description</b>	Details if the locator LED is active on this component
<b>Context</b>	<a href="#">platform linecard slot number locator-state keyword</a>
<b>Tree</b>	<a href="#">locator-state</a>
<b>Default</b>	inactive
<b>Options</b>	<ul style="list-style-type: none"> <li>• active Locator LED is currently active</li> </ul>

	<ul style="list-style-type: none"> <li>inactive</li> </ul> <p>Locator LED is currently inactive</p>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **manufactured-date** *string*

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <a href="#">number</a> <a href="#">manufactured-date</a> <i>string</i>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform</a> <a href="#">linecard slot</a> <a href="#">number</a> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> <li>empty Component slot is empty</li> <li>downloading Component is downloading image into memory</li> <li>booting Component is booting downloaded image</li> <li>starting Component image operational, application processes starting</li> <li>failed Component or process has failed</li> <li>synchronizing Component is currently being synchronized</li> <li>upgrading</li> </ul>

Component is currently being upgraded

- low-power

Component is offline due to insufficient system power

- degraded

Component or process is in a degraded state

- warm-reboot

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

### **part-number *string***

**Description**

Part number for this component

**Context**

[platform linecard slot number part-number string](#)

**Tree**

[part-number](#)

**Configurable**

False

**Platforms**

Supported on all platforms

### **power**

**Description**

State related to power consumption and allocation for this component

**Context**

[platform linecard slot number power](#)

**Tree**

[power](#)

**Configurable**

False

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **required *number***

**Description**

The power budget required to enable this component

<b>Context</b>	<a href="#">platform linecard slot number power required number</a>
<b>Tree</b>	<a href="#">required</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**used number**

<b>Description</b>	The power in use by this component
<b>Context</b>	<a href="#">platform linecard slot number power used number</a>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**rebooting-at string**

<b>Description</b>	Indicates the date and time this component will reboot. If empty, no delayed reboots are queued for this component. A non empty value implies that a delayed reboot operation has been triggered for this component, which can be aborted using 'tools platform <component> reboot cancel'.
<b>Context</b>	<a href="#">platform linecard slot number rebooting-at string</a>
<b>Tree</b>	<a href="#">rebooting-at</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**removable boolean**

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform linecard slot number removable boolean</a>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**serial-number** *string*

<b>Description</b>	The serial number for this component
<b>Context</b>	<a href="#">platform linecard slot number serial-number string</a>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**software-version** *string*

<b>Description</b>	Image version version running on this component  This version is the squashfs version, and may not represent the current per-application versions if versions have been modified after the system has been installed.
<b>Context</b>	<a href="#">platform linecard slot number software-version string</a>
<b>Tree</b>	<a href="#">software-version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**temperature**

<b>Description</b>	State related to temperature for this component
<b>Context</b>	<a href="#">platform linecard slot number temperature</a>
<b>Tree</b>	<a href="#">temperature</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**alarm-status** *boolean*

<b>Description</b>	Indicates if a temperature sensor of this component is currently in an alarm state  An alarm state is triggered if the margin is <=2 degrees, indicating that a thermal protection shut down is imminent unless adequate system cooling is provided to bring the temperature sensor back into safe operating ranges.
<b>Context</b>	<a href="#">platform linecard slot number temperature alarm-status boolean</a>
<b>Tree</b>	<a href="#">alarm-status</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **instant number**

**Description** Represents the highest current temperature of any sensor on this component  
Note that as multiple sensors may feed in, that this field and the margin field may be referencing different sensors.

**Context** [platform linecard slot number temperature instant number](#)

**Tree** [instant](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **margin number**

**Description** Indicates the lowest alarm margin of any sensor on this component  
The margin is the delta between the current sensor temperature and the thermal protection threshold for that sensor. Note that as multiple sensors may feed in, that this field and the instant field may be referencing different sensors.

**Context** [platform linecard slot number temperature margin number](#)

**Tree** [margin](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **maximum number**

**Description** Represents the highest temperature any sensor on this component has reached since it booted

**Context** [platform linecard slot number temperature maximum number](#)

**Tree** [maximum](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **maximum-time string**

**Description** Indicates the time this component reached the temperature referenced in the maximum field

**Context** [platform linecard slot number temperature maximum-time string](#)

<b>Tree</b>	<a href="#">maximum-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**type string**

<b>Description</b>	Linecard type, as translated from the components EEPROM
<b>Context</b>	<a href="#">platform linecard slot number type string</a>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**power-supply id number**

<b>Description</b>	Top-level container for power supply module configuration and state
<b>Context</b>	<a href="#">platform power-supply id number</a>
<b>Tree</b>	<a href="#">power-supply</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id number**

<b>Description</b>	Numeric identifier for the power supply module
<b>Context</b>	<a href="#">platform power-supply id number</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**capacity number**

<b>Description</b>	The total capacity the power supply module can provide
<b>Context</b>	<a href="#">platform power-supply id number capacity number</a>
<b>Tree</b>	<a href="#">capacity</a>
<b>Units</b>	watts
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **clei-code** *string*

**Description** The Common Language Identification Code for this component

**Context** [platform power-supply id](#) *number* [clei-code](#) *string*

**Tree** [clei-code](#)

**Configurable** False

**Platforms** Supported on all platforms

### **failure-reason** *string*

**Description** The reason the component transitioned to a failed state  
Field is empty if the component is not currently in a failure state

**Context** [platform power-supply id](#) *number* [failure-reason](#) *string*

**Tree** [failure-reason](#)

**Configurable** False

**Platforms** Supported on all platforms

### **fan**

**Description** Top-level container for state relating to fans

**Context** [platform power-supply id](#) *number* [fan](#)

**Tree** [fan](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **speed** *number*

**Description** The current speed of the fan

**Context** [platform power-supply id](#) *number* [fan speed](#) *number*

**Tree** [speed](#)

**Range** 0 to 100

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**speed-rpm** *number*

<b>Description</b>	The current RPM of the fan
<b>Context</b>	<a href="#">platform power-supply id number fan speed-rpm number</a>
<b>Tree</b>	<a href="#">speed-rpm</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**feed id** *number*

<b>Description</b>	List of feeds on this power-supply
<b>Context</b>	<a href="#">platform power-supply id number feed id number</a>
<b>Tree</b>	<a href="#">feed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

**id** *number*

<b>Description</b>	ID of the feed
<b>Context</b>	<a href="#">platform power-supply id number feed id number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

**current** *decimal-number*

<b>Description</b>	Current input amperage of this feed
<b>Context</b>	<a href="#">platform power-supply id number feed id number current decimal-number</a>
<b>Tree</b>	<a href="#">current</a>
<b>Units</b>	amps
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

**voltage** *decimal-number*

<b>Description</b>	Current input voltage for this feed
<b>Context</b>	<a href="#">platform power-supply id number feed id number voltage decimal-number</a>

<b>Tree</b>	<a href="#">voltage</a>
<b>Units</b>	volts
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

## healthz

<b>Description</b>	<p>The health of the component</p> <p>The parameters within this container indicate the status of the component beyond whether it is operationally up or down. When a signal is received that a component is in an unhealthy state the gNOI.Healthz service can be used to retrieve further diagnostic information relating to the component. The contents of this directory relate only to the specific component that it is associated with.</p>
<b>Context</b>	<a href="#">platform power-supply id number healthz</a>
<b>Tree</b>	<a href="#">healthz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-unhealthy string

<b>Description</b>	<p>Last unhealthy time</p> <p>The time at which the component was last observed to transition from the healthy state to any other state, represented as nanoseconds since the Unix epoch.</p>
<b>Context</b>	<a href="#">platform power-supply id number healthz last-unhealthy string</a>
<b>Tree</b>	<a href="#">last-unhealthy</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**status** *keyword*

<b>Description</b>	Health status The status of the component, indicating its current health.
<b>Context</b>	<a href="#">platform power-supply id number healthz status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unspecified Unspecified status The component's health status has not yet been checked by the system.</li> <li>healthy Healthy status The component is in a healthy state, and is operating within the expected parameters.</li> <li>unhealthy Unhealthy status The component is in a unhealthy state, it is not performing the function expected of it.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unhealthy-count** *number*

<b>Description</b>	Unhealthy count The number of times the component has transitioned from the healthy state to any other state.
<b>Context</b>	<a href="#">platform power-supply id number healthz unhealthy-count number</a>
<b>Tree</b>	<a href="#">unhealthy-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## input

<b>Description</b>	Top-level container for power-supply input state
<b>Context</b>	<a href="#">platform power-supply id number input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## current *decimal-number*

<b>Description</b>	Current amperage input/output for the power-supply
<b>Context</b>	<a href="#">platform power-supply id number input current decimal-number</a>
<b>Tree</b>	<a href="#">current</a>
<b>Units</b>	amps
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## power *decimal-number*

<b>Description</b>	Current power input/output for the power-supply
<b>Context</b>	<a href="#">platform power-supply id number input power decimal-number</a>
<b>Tree</b>	<a href="#">power</a>
<b>Units</b>	watts
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## voltage *decimal-number*

<b>Description</b>	Current voltage input/output for the power-supply
<b>Context</b>	<a href="#">platform power-supply id number input voltage decimal-number</a>
<b>Tree</b>	<a href="#">voltage</a>
<b>Units</b>	volts
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted** *string*

<b>Description</b>	The date and time this component last booted For components that do not boot, this is the time the component was last discovered by the active control module
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">last-booted</a> <i>string</i>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted-reason** *identityref*

<b>Description</b>	The reason this component last booted or rebooted For components without the ability to 'boot' this field is never populated
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">last-booted-reason</a> <i>identityref</i>
<b>Tree</b>	<a href="#">last-booted-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">user-initiated-reboot</a> A user initiated the reboot directly via a management interface</li> <li>• <a href="#">power-failure</a> The system rebooted the component due to insufficient power</li> <li>• <a href="#">critical-error</a> The system rebooted the component due to an internal critical error</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-change** *string*

<b>Description</b>	The date and time this component last changed state
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**manufactured-date** *string*

<b>Description</b>	The date this component was manufactured
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">manufactured-date</a> <i>string</i>
<b>Tree</b>	<a href="#">manufactured-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-reason** *keyword*

<b>Description</b>	Indicates the reason for the current state of the component
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">oper-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-input/fault No power input, or other hardware fault detected</li> <li>eprom-invalid EEPROM of this power supply is either invalid or corrupt</li> <li>airflow-mismatch The detected airflow of this power supply does not match the system-calculated airflow direction  The logic for determining the system-calculated direction is: - Majority wins between present fan trays - In the case where there are equal F2B or B2F fan-trays, PSUs are used as a tie break (PSUs only are counted in the event a tie breaker is needed) - F2B wins if no tie break can be used</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	The operational state of this component
<b>Context</b>	<a href="#">platform power-supply id</a> <i>number</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> </ul>

- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**output****Description**

Top-level container for power-supply output state

**Context**[platform power-supply id](#) *number* **output****Tree**[output](#)**Configurable**

False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **current** *decimal-number*

**Description** Current amperage input/output for the power-supply  
**Context** [platform power-supply id number output current decimal-number](#)  
**Tree** [current](#)  
**Units** amps  
**Configurable** False  
**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **power** *decimal-number*

**Description** Current power input/output for the power-supply  
**Context** [platform power-supply id number output power decimal-number](#)  
**Tree** [power](#)  
**Units** watts  
**Configurable** False  
**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **voltage** *decimal-number*

**Description** Current voltage input/output for the power-supply  
**Context** [platform power-supply id number output voltage decimal-number](#)  
**Tree** [voltage](#)  
**Units** volts  
**Configurable** False  
**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **part-number** *string*

**Description** Part number for this component  
**Context** [platform power-supply id number part-number string](#)  
**Tree** [part-number](#)  
**Configurable** False  
**Platforms** Supported on all platforms

**removable** *boolean*

<b>Description</b>	Details if this component can be removed from the system
<b>Context</b>	<a href="#">platform power-supply id number removable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">removable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**serial-number** *string*

<b>Description</b>	The serial number for this component
<b>Context</b>	<a href="#">platform power-supply id number serial-number</a> <i>string</i>
<b>Tree</b>	<a href="#">serial-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**temperature**

<b>Description</b>	State related to temperature for this component
<b>Context</b>	<a href="#">platform power-supply id number temperature</a>
<b>Tree</b>	<a href="#">temperature</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**alarm-status** *boolean*

<b>Description</b>	Indicates if a temperature sensor of this component is currently in an alarm state  An alarm state is triggered if the margin is $\leq 2$ degrees, indicating that a thermal protection shut down is imminent unless adequate system cooling is provided to bring the temperature sensor back into safe operating ranges.
<b>Context</b>	<a href="#">platform power-supply id number temperature alarm-status</a> <i>boolean</i>
<b>Tree</b>	<a href="#">alarm-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**instant** *number*

<b>Description</b>	Represents the highest current temperature of any sensor on this component Note that as multiple sensors may feed in, that this field and the margin field may be referencing different sensors.
<b>Context</b>	<a href="#">platform power-supply id</a> <a href="#">number</a> <a href="#">temperature instant</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">instant</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**maximum** *number*

<b>Description</b>	Represents the highest temperature any sensor on this component has reached since it booted
<b>Context</b>	<a href="#">platform power-supply id</a> <a href="#">number</a> <a href="#">temperature maximum</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">maximum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**maximum-time** *string*

<b>Description</b>	Indicates the time this component reached the temperature referenced in the maximum field
<b>Context</b>	<a href="#">platform power-supply id</a> <a href="#">number</a> <a href="#">temperature maximum-time</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">maximum-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *string*

<b>Description</b>	Power-supply type, as translated from the components EEPROM
<b>Context</b>	<a href="#">platform power-supply id</a> <a href="#">number</a> <a href="#">type</a> <a href="#">string</a>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**redundancy**

<b>Description</b>	Top-level container for platform redundancy
<b>Context</b>	<a href="#">platform redundancy</a>
<b>Tree</b>	<a href="#">redundancy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**active-module** *keyword*

<b>Description</b>	Control module currently active
<b>Context</b>	<a href="#">platform redundancy active-module</a> <i>keyword</i>
<b>Tree</b>	<a href="#">active-module</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• A</li> <li>• B</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**failover-time** *string*

<b>Description</b>	Date and time of the last control module failover
<b>Context</b>	<a href="#">platform redundancy failover-time</a> <i>string</i>
<b>Tree</b>	<a href="#">failover-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**synchronization**

<b>Description</b>	Top-level container for redundancy synchronization
<b>Context</b>	<a href="#">platform redundancy synchronization</a>
<b>Tree</b>	<a href="#">synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**last-synchronization string**

<b>Description</b>	Last date and time a synchronization of system files occurred
<b>Context</b>	<a href="#">platform redundancy synchronization last-synchronization string</a>
<b>Tree</b>	<a href="#">last-synchronization</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**overlay**

<b>Description</b>	Top-level container for overlay synchronization
<b>Context</b>	<a href="#">platform redundancy synchronization overlay</a>
<b>Tree</b>	<a href="#">overlay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**last-synchronization string**

<b>Description</b>	Last date and time a synchronization of the overlay occurred
<b>Context</b>	<a href="#">platform redundancy synchronization overlay last-synchronization string</a>
<b>Tree</b>	<a href="#">last-synchronization</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**next-synchronization string**

<b>Description</b>	Next date and time a synchronization of the overlay will occur
<b>Context</b>	<a href="#">platform redundancy synchronization overlay next-synchronization string</a>
<b>Tree</b>	<a href="#">next-synchronization</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**synchronization-frequency** *number*

<b>Description</b>	Sets the frequency of overlay synchronizations This has no effect if overlay is not a configured synchronization mode. Changing this value results in the timer to the next synchronization being reset.
<b>Context</b>	<a href="#">platform redundancy synchronization overlay synchronization-frequency</a> <i>number</i>
<b>Tree</b>	<a href="#">synchronization-frequency</a>
<b>Range</b>	30 to 65535
<b>Default</b>	60
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**state** *keyword*

<b>Description</b>	Current synchronization status
<b>Context</b>	<a href="#">platform redundancy synchronization state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>synchronized</code> Standby control module is ready and synchronized</li> <li>• <code>synchronizing</code> Standby control module is currently synchronizing</li> <li>• <code>not-ready</code> Standby control module is not synchronized</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**resource-management**

<b>Description</b>	Container for managing resources in a system-wide context
<b>Context</b>	<a href="#">platform resource-management</a>
<b>Tree</b>	<a href="#">resource-management</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tcam**

<b>Description</b>	Container for managing the allocation of TCAM banks to different applications.
<b>Context</b>	<a href="#">platform resource-management tcam</a>
<b>Tree</b>	<a href="#">tcam</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**unified-forwarding-resources**

<b>Description</b>	Container for managing Broadcom-specific UFT resources.
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources</a>
<b>Tree</b>	<a href="#">unified-forwarding-resources</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3

**allocated-extra-ip-host-entries *number***

<b>Description</b>	The extra number of host entries that have been allocated from UFT shared banks.
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources allocated-extra-ip-host-entries <i>number</i></a>
<b>Tree</b>	<a href="#">allocated-extra-ip-host-entries</a>
<b>Range</b>	0 to 262144
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**allocated-extra-mac-entries *number***

<b>Description</b>	The extra number of MAC address entries that have been allocated from UFT shared banks.
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources allocated-extra-mac-entries <i>number</i></a>
<b>Tree</b>	<a href="#">allocated-extra-mac-entries</a>
<b>Range</b>	0 to 262144

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **alpm keyword**

<b>Description</b>	<p>Controls the ALPM mode.</p> <p>If this is set to disabled then no UFT banks are allocated to ALPM. This mode is not supported by 7220 IXR-D4 or 7220 IXR-D5.</p> <p>If this is set to enabled then 4 UFT shared banks are allocated to ALPM. This mode is not supported by 7220 IXR-D2 or 7220 IXR-D3.</p> <p>If this is set to high-scale then 8 UFT shared banks are allocated to ALPM. This mode is not supported by 7220 IXR-D1.</p>
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources alpm keyword</a>
<b>Tree</b>	<a href="#">alpm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• disabled</li> <li>• enabled</li> <li>• high-scale</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **ipv6-128bit-lpm-entries number**

<b>Description</b>	<p>Sets the value for num_ipv6_lpm_128b_entries, which affects IP FIB scale.</p> <p>H2/H3 range: 0-1024 D1 range: 0-4096 D2/D3 range: 0-8192</p>
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources ipv6-128bit-lpm-entries number</a>
<b>Tree</b>	<a href="#">ipv6-128bit-lpm-entries</a>
<b>Range</b>	0 to 8192
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3

### **requested-extra-ip-host-entries number**

<b>Description</b>	<p>The extra number of host entries that are desired.</p> <p>The number of UFT shared banks that are reserved for IPv4 and IPv6 host entries is given by: <math>\min(N//X, P-A)</math></p>
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where: N = configured value of requested-extra-ip-host-entries X = the size of each shared bank, which is platform specific P-A = platform-specific number of shared banks, subtracting the ALPM banks

requested-extra-ip-host-entries is interpreted in terms of IPv4 hosts (single-wide entries). IPv6 host entries are double-wide so 1 IPv4 host entry + 1 IPv6 host-entry counts as 3 entries.

All UFT shared banks that are not reserved by ALPM and not reserved for extra IP host entries are used for extra MAC entries.

On D1 the default value is 48K entries, which provides 3 shared banks, max is 96K. On D2/D3 the default value is 128K entries, which provides 4 shared banks, max is 256K.

<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources requested-extra-ip-host-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">requested-extra-ip-host-entries</a>
<b>Range</b>	0 to 262144
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **xdp-restart-required** *boolean*

<b>Description</b>	Reads true if the user has committed a change to one or more of the configurable values in the uft container but has not yet restarted XDP so the operational values are still the values initialized at the last XDP restart.
<b>Context</b>	<a href="#">platform resource-management unified-forwarding-resources xdp-restart-required</a> <i>boolean</i>
<b>Tree</b>	<a href="#">xdp-restart-required</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3

### **resource-monitoring**

<b>Description</b>	Enter the resource-monitoring context
<b>Context</b>	<a href="#">platform resource-monitoring</a>
<b>Tree</b>	<a href="#">resource-monitoring</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**acl**

<b>Description</b>	Enter the acl context
<b>Context</b>	<a href="#">platform resource-monitoring acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**resource name *identityref***

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform resource-monitoring acl resource name <i>identityref</i></a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name *identityref***

<b>Description</b>	The name of the ACL resource
<b>Context</b>	<a href="#">platform resource-monitoring acl resource name <i>identityref</i></a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">input-ipv4-filter-instances</a> This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on the forwarding complex. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every subinterface using the IPv4 filter.</li> <li>• <a href="#">input-ipv4-qos-multifield-instances</a> This resource is used every time an IPv4 multifield classifier policy is applied to ingress traffic on a subinterface.</li> <li>• <a href="#">input-ipv4-filter-instances-routed</a> This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on routed subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every routed subinterface using the IPv4 filter.</li> <li>• <a href="#">input-ipv4-filter-instances-bridged</a> This resource is used every time an IPv4 filter instance is created and applied to ingress traffic on bridged subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only;</li> </ul>

otherwise one instance is used for every bridged subinterface using the IPv4 filter.

- input-ipv6-filter-instances

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on the forwarding complex. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every subinterface using the IPv6 filter.

- input-ipv6-qos-multifield-instances

This resource is used every time an IPv6 multifield classifier policy is applied to ingress traffic on a subinterface.

- input-ipv6-filter-instances-routed

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on routed subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every routed subinterface using the IPv6 filter.

- input-ipv6-filter-instances-bridged

This resource is used every time an IPv6 filter instance is created and applied to ingress traffic on bridged subinterfaces. Only one instance is used if the subinterface-specific property of the filter is set to output-only; otherwise one instance is used for every bridged subinterface using the IPv6 filter.

- if-input-ipv4-stats

Resource pool of stats entries available for ingress IPv4 ACLs

- if-input-ipv6-stats

Resource pool of stats entries available for ingress IPv6 ACLs

- if-output-ipv4-stats

Resource pool of stats entries available for egress IPv4 ACLs

- if-output-ipv6-stats

Resource pool of stats entries available for egress IPv6 ACLs

- if-output-cpm-stats

Resource pool of stats entries shared by egress IPv4/IPv6/MAC TCAM entries, and CPM-filter IPv4/IPv6/MAC TCAM entries

Egress Ipv4 -> uses single stat counter Egress Ipv6 -> uses single stat counter Egress MAC -> uses single stat counter Cpm Ipv4 -> uses two stat counters Cpm Ipv6 -> uses two stat counters Cpm MAC -> uses two stat counters

- input-acl-qos-template-policers

This resource is used every time an IPv4 or IPv6 input subinterface filter entry uses a rate-limit policer, or, on TD4 only, a subinterface policer-template is used.

- input-qos-template-policers

This resource is used every time a QoS subinterface policer-template is used.

- input-acl-ipv4-policers

This resource is used every time an IPv4 input subinterface filter entry uses a rate-limit policer.

- input-acl-ipv6-policers

This resource is used every time an IPv6 input subinterface filter entry uses a rate-limit policer.

- output-acl-cpm-filter-policers

This resource is used every time an IPv4 or IPv6 output subinterface filter or CPM filter entry uses a rate-limit policer.

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### falling-threshold-log *number*

<b>Description</b>	Sets the threshold that triggers the generation of a NOTICE log whenever the utilization of the ACL resource in any linecard/complex/core falls reaches this value in a falling direction
<b>Context</b>	<a href="#">platform resource-monitoring acl resource name <i>identityref</i> falling-threshold-log <i>number</i></a>
<b>Tree</b>	<a href="#">falling-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### rising-threshold-log *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log whenever the utilization of the ACL resource in any linecard/complex/core reaches this value in a rising direction
<b>Context</b>	<a href="#">platform resource-monitoring acl resource name <i>identityref</i> rising-threshold-log <i>number</i></a>
<b>Tree</b>	<a href="#">rising-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## datapath

**Description** Container for monitoring datapath resources system-wide

**Context** [platform resource-monitoring datapath](#)

**Tree** [datapath](#)

**Configurable** True

**Platforms** Supported on all platforms

## asic

**Description** Container for monitoring datapath resources that are specific to a subset of the chipsets supported by SRLinux.

**Context** [platform resource-monitoring datapath asic](#)

**Tree** [asic](#)

**Configurable** True

**Platforms** Supported on all platforms

## resource [name identityref](#)

**Description** List of ASIC-specific datapath resources

**Context** [platform resource-monitoring datapath asic resource name identityref](#)

**Tree** [resource](#)

**Configurable** True

**Platforms** Supported on all platforms

## name [identityref](#)

**Description** The name of the ASIC-specific datapath resource.

**Context** [platform resource-monitoring datapath asic resource name identityref](#)

**Options**

- [ip-lpm-ipv4-routes](#)  
IPv4 longest prefix match route resources
- 7220 D1/D2/D3: Reports the number of IPv4 entries in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of half-wide entries in all partitions (i.e. it assumes no IPv6 routes consume

those entries). In ALPM mode, free entries is the Minimum Guaranteed Capacity returned by the BCM SDK.

7220 D4/D5 and 7220 H2/H3/H4: Reports the number of IPv4 routes installed in the FIB. Free entries is the Minimum Guaranteed Capacity returned by the BCM SDK.

- ip-lpm-ipv6-routes

IPv6 longest prefix match route resources

Reports the number of IPv6 routes installed in the FIB. Free entries is the Minimum Guaranteed Capacity returned by the BCM SDK.

- ip-lpm-ipv6-shorter-routes

IPv6 longest prefix match route resources when the prefix length is less than or equal to 64

7220 D1/D2/D3: Reports the number of IPv6 entries with prefix length less than 65 bits in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of single-wide + double-wide entries (i.e. it assumes no other types of routes consume those entries). In ALPM mode, free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

7220 H2/H3: Reports the number of IPv6 entries with prefix length less than 65 bits installed in the FIB. Free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

- ip-lpm-ipv6-longer-routes

IPv6 longest prefix match route resources when the prefix length is greater than 64

7220 D1/D2/D3: Reports the number of IPv6 entries with prefix length greater than 64 bits in the hardware LPM table. In non-ALPM mode, free entries is the remaining number of double-wide entries (i.e. it assumes no other types of routes consume those entries). In ALPM mode, free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

7220 H2/H3: Reports the number of IPv6 entries with prefix length greater than 64 bits installed in the FIB. Free entries is based on the Minimum Guaranteed Capacity returned by the BCM SDK.

- exact-match-entries

IP exact match lookup table resources

Reports the number of half-wide entries used in the LEM table. Each MPLS ILM record uses one half-wide entry. Each IPv4 address used as a host route, ARP entry or subnet broadcast address requires a half-wide entry. An IPv6 address used as a host route, or ND entry requires a single-wide entry (2 half-wide entries). Free entries is the remaining number of half-wide entries.

- ip-tunnel-source-ipv4-addresses

IP tunnel source IPv4 address resources

Each IPinIP and GRE tunnel with a different source IPv4 address uses one of these resources.

- ip-tunnel-source-ipv6-addresses

IP tunnel source IPv6 address resources

Each IPinIP and GRE tunnel with a different source IPv6 address uses one of these resources.

- underlay-ecmp-groups

Underlay ECMP group resources

ECMP groups are partitioned into overlay and underlay groups. The underlay partition is further subdivided into groups used for underlay ECMP and groups used for VP LAGs (EVPN M-H). This counts the utilization of the sub-resource used for ECMP.

- vp-lag-groups

VP LAG group resources

ECMP groups are partitioned into overlay and underlay groups. The underlay partition is further subdivided into groups used for underlay ECMP and groups used for VP LAGs (EVPN M-H). This counts the utilization of the sub-resource used for VP LAGs.

- overlay-ecmp-groups

Overlay ECMP group resources

ECMP groups are partitioned into overlay and underlay groups. This counts the utilization of the overlay ECMP partition.

- underlay-ecmp-members

Underlay ECMP member resources

ECMP members are partitioned into overlay and underlay. This counts the utilization of the partition used for underlay.

- overlay-ecmp-members

Overlay ECMP member resources

ECMP members are partitioned into overlay and underlay. This counts the utilization of the partition used for overlay.

- underlay-egress-next-hops

Underlay egress next-hop resources

Egress next-hops are partitioned into overlay and underlay. This counts the utilization of the partition used for underlay.

- overlay-egress-next-hops

Overlay egress next-hop resources

Egress next-hops are partitioned into overlay and underlay. This counts the utilization of the partition used for overlay.

- dgpp-module-ids

DGPP module ID resources

DGPPs are an aggregate id consisting of a `module_id` and a `port_id`. There are 64 modules and 120 ports per module. Each 'network' ARP entry (IP next-hop) needs a DGPP - the `module_id` is allocated against the network interface (port) and a `port_id` is allocated from within the module. A `module_id` will only be allocated when the first ArpEntry is added (freed when last is removed) but is owned exclusively by that network interface. A network interface may require more than one `module_id` - i.e. if there are 245 ArpEntries on ethernet-1/1 (possibly spread across multiple network-instance interfaces) then 3 `module_ids` are required.

- `egress-vlan-translate-egress-vnis`  
EGR\_VLAN\_XLATE\_1 resources  
Corresponds to the 'EGR\_VLAN\_XLATE\_1' HW table (8K entries). These entries are used for finding the egress VNI to be used for VXLAN packets.
- `egress-vlan-translate-local-bias-pairs`  
EGR\_VLAN\_XLATE\_2 resources  
Corresponds to the 'EGR\_VLAN\_XLATE\_2' HW table (24K entries). These entries are used for local bias (ES pruning).
- `level-1-ecmp-groups`  
Level 1 (top level) ECMP group resources.
- `level-2-ecmp-groups`  
Level 2 (middle level) ECMP group resources.
- `level-3-ecmp-groups`  
Level 3 (bottom level) ECMP group resources.
- `level-1-ecmp-members`  
Level 1 (top level) ECMP member resources.
- `level-2-ecmp-members`  
Level 2 (middle level) ECMP member resources.
- `level-3-ecmp-members`  
Level 3 (bottom level) ECMP member resources.
- `level-1-non-ecmp-fecs`  
Level 1 (top level) non-ECMP FEC resources.
- `level-2-non-ecmp-fecs`  
Level 2 (middle level) non-ECMP FEC resources.
- `level-3-non-ecmp-fecs`  
Level 3 (bottom level) non-ECMP FEC resources.
- `decap-next-hop-statistics`  
Statistics resources for counting packets matching a tunnel termination entry and then forwarded to a next-hop



One resource is one packet/octet counter pair that is allocated to counting each case where packets: (a) match a gRIBI-programmed tunnel termination entry and get forwarded to a next-hop that does redirect to another network-instance (1 counter pair for all redirect targets) (b) match a gRIBI-programmed tunnel termination entry and get forwarded to a next-hop that does IP-in-IP encapsulation towards a new endpoint address (1 counter pair per new endpoint address)

- subinterface-basic-stats-counters

Stats resources used by bridged and routed (non-IRB) subinterfaces that do not provide a breakdown by protocol family

- subinterface-detailed-stats-counters

Stats resources used by routed (non-IRB) subinterfaces that provide a breakdown by protocol family

- subinterface-irb-stats-counters

Stats resources used by routed IRB subinterfaces

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### upper-threshold-clear *number*

<b>Description</b>	Sets the threshold that triggers the generation of a NOTICE log and the setting of 'used-upper-threshold-exceeded' to 'false' whenever the utilization of the datapath resource in any linecard (if applicable) or forwarding complex or pipeline (if applicable) reaches this value in a falling direction
<b>Context</b>	<a href="#">platform resource-monitoring datapath asic resource name <i>identityref</i> upper-threshold-clear <i>number</i></a>
<b>Tree</b>	<a href="#">upper-threshold-clear</a>
<b>Range</b>	0 to 100
<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### upper-threshold-set *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log and the setting of 'used-upper-threshold-exceeded' to 'true' whenever the utilization of the datapath resource in any linecard (if applicable) or forwarding complex or pipeline (if applicable) reaches this value in a rising direction
<b>Context</b>	<a href="#">platform resource-monitoring datapath asic resource name <i>identityref</i> upper-threshold-set <i>number</i></a>

<b>Tree</b>	<a href="#">upper-threshold-set</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## xdp

<b>Description</b>	Container for monitoring datapath resources that are generic in concept.
<b>Context</b>	<a href="#">platform resource-monitoring datapath xdp</a>
<b>Tree</b>	<a href="#">xdp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## resource name *identityref*

<b>Description</b>	List of generic datapath resources
<b>Context</b>	<a href="#">platform resource-monitoring datapath xdp resource name <i>identityref</i></a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## name *identityref*

<b>Description</b>	<p>The name of the XDP datapath resource.</p> <p>Some of these resources may be software only (i.e. no correspondence to a hardware table).</p> <p>Some of these resources may depend on multiple HW tables and when the utilization is reported it represents an aggregated or summarized view.</p>
<b>Context</b>	<a href="#">platform resource-monitoring datapath xdp resource name <i>identityref</i></a>
<b>Options</b>	<ul style="list-style-type: none"> <li>arp-nd-entries           <p>IPv4 ARP and IPv6 neighbor discovery resources</p> <p>Each IPv4 ARP and each IPv6 neighbor entry counts as 1 used resource against a total that is platform dependent.</p> </li> <li>ip-hosts           <p>IP host route resources</p> </li> </ul>

7220 D1/D2/D3: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every IPv4 multicast snoop entry requires 2 entries. In non-ALPM operation every remote /32 route also requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every IPv6 multicast snoop entry requires 4 entries. In non-ALPM operation every remote /128 route also requires 2 entries. Free entries reflects the total number of entries remaining in shared + dedicated UFT banks.

7220 D4/D5: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries. Every (\*, G) IPv4 multicast snoop entry requires 1 entry. Every (S, G) IPv4 multicast snoop entry requires 2 entries. Every (\*, G) IPv6 multicast snoop entry requires 2 entries. Every (S, G) IPv6 multicast snoop entry requires 4 entries.

7220 H2/H3/H4: Reports the number of entries used in the IP host table. Every local host /32 route, ARP entry and IPv4 subnet broadcast address requires 1 entry. Every local host /128 route, and ND entry requires 2 entries.

- ip-lpm-routes

IP longest prefix match route resources

7250 IXR/IXRe: Every installed IPv4 and IPv6 route counts as one used route.

7220 D1/D2/D3: In ALPM-disabled mode: Reports the number of half-wide entries. An IPv4 route requires a half-wide entry. An IPv6 route that is /64 or less requires a single-wide entry (2 half-wide entries). An IPv6 route that is more than /64 requires a double-wide entry (4 half-wide entries). In ALPM mode: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 2 used routes.

7220 D4/D5: Every IPv4 route counts as 1 used route and every IPv6 route (regardless of prefix length) counts as 4 used routes.

- mac-addresses

MAC lookup table resources

Reports the number of entries used in the MAC lookup table. On 7220 D1/D2/D3/D4/D5, free entries reflects the total number of entries remaining in shared + dedicated UFT banks

- mac-next-hops

Direct MAC next-hop resources

A resource consumed by every next-hop of a gRIBI route that is specified as an interface name plus MAC address

- direct-ip-next-hops

Direct IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route or MPLS route/tunnel that is resolved directly to a local interface.

- indirect-ip-next-hops

Indirect IP next-hop resources

Reports the number of entries, where 1 entry is used for every next-hop of an IP route that requires resolution by a non-local route. This does not consider underlying ASIC resources.

- tunnel-next-hops

Tunnel next-hop resources

Reports the number of tunnel next-hop entries. 1 tunnel next-hop is required every time an indirect next-hop (e.g. a BGP next-hop) is resolved by a tunnel (BGP-LU, LDP, SR-ISIS or VXLAN)

- ecmp-groups

ECMP group resources

7250 IXR/IXRe: Reports the used number of ECMP FECs, adding L1 ECMP FECs, L2 ECMP FECs and L3 ECMP FECs.

7220 D1/D2/D3/D4/D5: Reports the used number of ECMP groups, adding overlay and underlay ECMP groups (if applicable).

7220 H2/H3/H4: Reports used number of ECMP groups.

- ecmp-members

ECMP member resources

7250 IXR/IXRe: Reports the used number of ECMP member FECs, adding L1 ECMP member FECs, L2 ECMP member FECs and L3 ECMP member FECs.

7220 D1/D2/D3/D4/D5: Reports the used number of ECMP members, adding overlay and underlay ECMP members (if applicable).

7220 H2/H3/H4: Reports used number of ECMP members.

- egress-next-hops

Egress next-hop resources

7220 D2/D3/D4/D5: Reports the number of entries used in the egress next-hop table, counting entries in the overlay partition and entries in the underlay partition. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.

7220 H2/H3/H4: Reports the number of entries used in the egress next-hop table. 1 entry = 1 IPv4 next-hop address or 1 IPv6 next-hop address.

- lag-groups

LAG group resources

Reports the number of LAG resources used, including DGPP LAGs.

- lag-members

## LAG member resources

Reports the number of LAG member resources used, including DGPP LAG members.

- subinterfaces

## Subinterface resources

There are a maximum of 127 subinterfaces per TH3 pipeline (limited by VFP/EFP TCAM resources). This counts the utilization of those resources.

- mpls-next-hops

## MPLS next-hop (NHLFE) resources

One resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an ILM entry that performs a 'swap'. One additional resource is used for every next-hop that pushes an MPLS label in every next-hop-group that is tied to an MPLS tunnel.

- mpls-incoming-labels

## MPLS label lookup (ILM) resources

One resource is used for every MPLS ILM entry that performs either a 'swap' or a 'pop' operation.

- originating-tunnels

## Originating tunnel resources

One resource is used for every VXLAN, LDP, SR-ISIS or IPinIP tunnel originating on this node as head-end. On TD3 and TD4 systems this equates to a DVP resource.

- terminating-tunnels

## Terminating tunnel resources

One resource is used for every IPinIP tunnel terminating entry on this node.

**Configurable**

True

**Platforms**

Supported on all platforms

**upper-threshold-clear *number*****Description**

Sets the threshold that triggers the generation of a NOTICE log and the setting of 'used-upper-threshold-exceeded' to 'false' whenever the utilization of the datapath resource in any linecard (if applicable) or forwarding complex or pipeline (if applicable) reaches this value in a falling direction

**Context**

[platform resource-monitoring datapath xdp resource name \*identityref\* upper-threshold-clear \*number\*](#)

**Tree**

[upper-threshold-clear](#)

**Range**

0 to 100

<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### upper-threshold-set *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log and the setting of 'used-upper-threshold-exceeded' to 'true' whenever the utilization of the datapath resource in any linecard (if applicable) or forwarding complex or pipeline (if applicable) reaches this value in a rising direction
<b>Context</b>	<a href="#">platform resource-monitoring datapath xdp resource name <i>identityref</i> upper-threshold-set <i>number</i></a>
<b>Tree</b>	<a href="#">upper-threshold-set</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### mtu

<b>Description</b>	Enter the mtu context
<b>Context</b>	<a href="#">platform resource-monitoring mtu</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### resource [name \*identityref\*](#)

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform resource-monitoring mtu resource name <i>identityref</i></a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**name** *identityref*

<b>Description</b>	The name of the MTU resource
<b>Context</b>	<a href="#">platform resource-monitoring mtu resource name</a> <i>identityref</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ip-mtu IP MTU resource pool. One resource from this pool is consumed by every different IP MTU value used by the subinterfaces on the linecard forwarding-complex.</li> <li>• port-mtu Port MTU resource pool. One resource from this pool is consumed by every different port MTU value used by a port on the linecard forwarding-complex.</li> <li>• mpls-mtu MPLS MTU resource pool. One resource from this pool is consumed by every different MPLS MTU value used by the subinterfaces on the linecard forwarding-complex.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**falling-threshold-log** *number*

<b>Description</b>	Sets the threshold that triggers the generation of a NOTICE log whenever the utilization of the MTU resource in any linecard/complex/core reaches this value in a falling direction and this is the first trigger since the last rising-threshold-log was triggered.
<b>Context</b>	<a href="#">platform resource-monitoring mtu resource name</a> <i>identityref</i> <a href="#">falling-threshold-log</a> <i>number</i>
<b>Tree</b>	<a href="#">falling-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**rising-threshold-log** *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log whenever the utilization of the MTU resource in any linecard/complex/core reaches this
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value in a rising direction and this is the first trigger since the last restart or since the last falling-threshold-log was triggered.

<b>Context</b>	<a href="#">platform resource-monitoring mtu resource name <i>identityref</i> rising-threshold-log number</a>
<b>Tree</b>	<a href="#">rising-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## qos

<b>Description</b>	Enter the qos context
<b>Context</b>	<a href="#">platform resource-monitoring qos</a>
<b>Tree</b>	<a href="#">qos</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## resource name *identityref*

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform resource-monitoring qos resource name <i>identityref</i></a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *identityref*

<b>Description</b>	The name of the QoS resource
<b>Context</b>	<a href="#">platform resource-monitoring qos resource name <i>identityref</i></a>
<b>Options</b>	<ul style="list-style-type: none"> <li>classifier-profiles</li> </ul> <p>A classifier-profile resource is used every time a different combination of IPv4 DSCP classifier and IPv6 DSCP classifier is applied to an ingress</p>



subinterface. One is always used by the combination of the default IPv4 DSCP classifier and the default IPv6 DSCP classifier.

- **rewrite-profiles**

A rewrite-profile resource is used every time a different combination of IPv4 DSCP rewrite-rule and IPv6 DSCP rewrite-rule is applied to an egress subinterface.

- **dscp-classifier-policies**

Every user-defined DSCP classifier policy that is configured uses one of these resources

- **dscp-mpls-rewrite-policies**

A rewrite-policy resource is used every time a different DSCP or MPLS traffic-class rewrite-rule policy is applied to an egress subinterface.

- **dscp-rewrite-policies**

Every user-defined dscp rewrite policy that is configured uses one of these resources.

- **dot1p-classifier-policies**

Every user-defined dot1p classifier policy that is configured uses one of these resources

- **dot1p-rewrite-policies**

Every user-defined dot1p rewrite policy that is configured uses one of these resources

- **input-policers**

Every input-policer that is allocated to the configured subinterfaces based on input-class-map

- **output-class-maps**

Every user-defined output class map that is configured uses one of these resources.

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### falling-threshold-log *number*

**Description**

Sets the threshold that triggers the generation of a NOTICE log whenever the utilization of the QoS resource in any linecard/complex/core falls reaches this value in a falling direction

**Context**

[platform resource-monitoring qos resource name \*identityref\* falling-threshold-log \*number\*](#)

**Tree**

[falling-threshold-log](#)

<b>Range</b>	0 to 100
<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rising-threshold-log *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log whenever the utilization of the QoS resource in any linecard/complex/core reaches this value in a rising direction
<b>Context</b>	<a href="#">platform resource-monitoring qos resource name <i>identityref</i> rising-threshold-log <i>number</i></a>
<b>Tree</b>	<a href="#">rising-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tcam

<b>Description</b>	Enter the tcam context
<b>Context</b>	<a href="#">platform resource-monitoring tcam</a>
<b>Tree</b>	<a href="#">tcam</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### resource name *identityref*

<b>Description</b>	Enter the resource list instance
<b>Context</b>	<a href="#">platform resource-monitoring tcam resource name <i>identityref</i></a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *identityref***Description**

The name of the TCAM resource

**Context**

[platform resource-monitoring tcam resource name](#) *identityref*

**Options**

- if-input-ipv4  
Resource pool of TCAM entries used by IPv4 ACLs applied as subinterface-input filters
- if-output-ipv4  
Resource pool of TCAM entries used by IPv4 ACLs applied as subinterface-output filters
- if-input-ipv6  
Resource pool of TCAM entries used by IPv6 ACLs applied as subinterface-input filters
- if-output-ipv6  
Resource pool of TCAM entries used by IPv6 ACLs applied as subinterface-output filters
- cpm-capture-ipv4  
Resource pool of TCAM entries used by IPv4 cpm-filter ACLs and capture-filter ACLs
- cpm-capture-ipv6  
Resource pool of TCAM entries used by IPv6 cpm-filter ACLs and capture-filter ACLs
- system-capture-ipv4  
Resource pool of TCAM entries used by IPv4 capture-filter ACLs and IPv4 system-filter ACLs
- system-capture-ipv6  
Resource pool of TCAM entries used by IPv6 capture-filter ACLs and IPv6 system-filter ACLs
- system-capture  
Resource pool of TCAM entries used by IPv4 + IPv6 capture-filter ACLs and system-filter ACLs
- capture-ipv4  
Resource pool of TCAM entries used by IPv4 capture-filter ACLs
- capture-ipv6  
Resource pool of TCAM entries used by IPv6 capture-filter ACLs
- if-output-cpm-ipv4  
Resource pool of TCAM entries used by IPv4 egress ACLs and cpm-filter ACLs
- if-output-cpm-ipv6

- Resource pool of TCAM entries used by IPv6 egress ACLs and cpm-filter ACLs
- if-output-cpm  
Resource pool of TCAM entries used by IPv4 + IPv6 egress ACLs and cpm-filter ACLs
- if-input-mac  
Resource pool of TCAM entries used by MAC ACLs applied as subinterface-input filters
- if-output-cpm-mac  
Resource pool of TCAM entries used by MAC egress ACLs and MAC cpm-filter ACLs
- policy-forwarding-vrf-selection-ipv4  
Resource pool of TCAM entries used by IPv4 policy-forwarding entries that redirect flows to a different network-instance
- policy-forwarding-nhg-ipv4  
Resource pool of TCAM entries used by IPv4 policy-forwarding entries that redirect flows to a NHG of IP next-hops or tunnels  
On TD4 systems IPv6 policy-forwarding entries share this resource with IPv4 entries.
- policy-forwarding-nhg-ipv6  
Resource pool of TCAM entries used by IPv6 policy-forwarding entries that redirect flows to a NHG of IP next-hops or tunnels
- if-input-policer  
Resource pool of TCAM entries used by ingress subinterface policer templates
- if-input-ipv4-qos  
Resource pool of TCAM entries associated with IPv4 multi-field QoS classification entries, when applied to subinterface input
- if-input-ipv6-qos  
Resource pool of TCAM entries associated with IPv6 multi-field QoS classification entries, when applied to subinterface input
- mrouter-mfib-redirect  
Resource pool of TCAM entries used by multicast snooping protocols in MAC-VRF network-instances  
One TCAM entry is used per multicast snooping protocol enabled in a MAC-VRF. For instance, if igmp-snooping and mld-snooping are enabled on a MAC-VRF, two entries are used. If only igmp-snooping is enabled, only one entry is used.
- tunnel-decap-ipv4-ipv6  
Resource pool of TCAM entries used for IPv4 and IPv6 tunnel-decapsulation groups

- `if-output-evpn-mh-multicast-non-df`

Resource pool of TCAM entries used by egress filtering of IP multicast traffic to non-Designated Forwarder subinterfaces

One TCAM entry is used when multicast snooping protocols are enabled on at least one MAC-VRF that has one or more subinterfaces associated with Ethernet Segments.

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **falling-threshold-log** *number*

<b>Description</b>	Sets the threshold that triggers the generation of a NOTICE log whenever the utilization of the TCAM resource in any linecard/complex/core falls reaches this value in a falling direction.  On platforms that support dynamic TCAM the utilization considers both free-dynamic and free-static.
<b>Context</b>	<a href="#">platform resource-monitoring tcam resource name</a> <i>identityref</i> <a href="#">falling-threshold-log</a> <i>number</i>
<b>Tree</b>	<a href="#">falling-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	70
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **rising-threshold-log** *number*

<b>Description</b>	Sets the threshold that triggers the generation of a WARNING log whenever the utilization of the TCAM resource in any linecard/complex/core reaches this value in a rising direction.  On platforms that support dynamic TCAM the utilization considers both free-dynamic and free-static.
<b>Context</b>	<a href="#">platform resource-monitoring tcam resource name</a> <i>identityref</i> <a href="#">rising-threshold-log</a> <i>number</i>
<b>Tree</b>	<a href="#">rising-threshold-log</a>
<b>Range</b>	0 to 100
<b>Default</b>	90
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## trust

<b>Description</b>	State information related to Platform Trust
<b>Context</b>	<a href="#">platform trust</a>
<b>Tree</b>	<a href="#">trust</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## secure-boot

<b>Description</b>	State information related to Secure Boot
<b>Context</b>	<a href="#">platform trust secure-boot</a>
<b>Tree</b>	<a href="#">secure-boot</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control [slot string](#)

<b>Description</b>	Secure Boot states related to control modules
<b>Context</b>	<a href="#">platform trust secure-boot control slot string</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## slot [string](#)

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">platform trust secure-boot control slot string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## oper-state [keyword](#)

<b>Description</b>	Secure Boot operational state
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<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string oper-state keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Secure Boot is enabled</li> <li>• down Secure Boot is disabled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **root-of-trust** *keyword*

<b>Description</b>	Root of Trust for Secure Boot execution
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string root-of-trust keyword</i>
<b>Tree</b>	<a href="#">root-of-trust</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• firmware Firmware Root of Trust</li> <li>• hardware Hardware Root of Trust</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **uefi-variables** *variable string*

<b>Description</b>	Content of the UEFI Secure Boot variables programmed in the control module
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string uefi-variables variable string</i>
<b>Tree</b>	<a href="#">uefi-variables</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **variable** *string*

<b>Description</b>	UEFI Secure Boot database variable name
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<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## contents

<b>Description</b>	Content Secure Boot database variable
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents</a>
<b>Tree</b>	<a href="#">contents</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## certificate *index number*

<b>Description</b>	List of X.509 certificates
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents certificate index number</a>
<b>Tree</b>	<a href="#">certificate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## *index number*

<b>Description</b>	The index of the certificate
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents certificate index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## data *binary*

<b>Description</b>	DER encoded X.509 certificate
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<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables variable</a> <i>string</i> <a href="#">contents certificate index</a> <i>number data binary</i>
<b>Tree</b>	<a href="#">data</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sha1-hash** *index number*

<b>Description</b>	List of SHA-1 hash digests
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables variable</a> <i>string</i> <a href="#">contents sha1-hash index</a> <i>number</i>
<b>Tree</b>	<a href="#">sha1-hash</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	The index of the hash
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables variable</a> <i>string</i> <a href="#">contents sha1-hash index</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**digest-value** *binary*

<b>Description</b>	SHA-1 digest
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables variable</a> <i>string</i> <a href="#">contents sha1-hash index</a> <i>number digest-value</i> <i>binary</i>
<b>Tree</b>	<a href="#">digest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sha256-hash index number**

<b>Description</b>	List of SHA-256 hash digests
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash index number</a>
<b>Tree</b>	<a href="#">sha256-hash</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	The index of the hash
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**digest-value binary**

<b>Description</b>	SHA-256 digest
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash index number digest-value binary</a>
<b>Tree</b>	<a href="#">digest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sha256-hash-cert index number**

<b>Description</b>	List of SHA-256 hash digests of X.509 certificates
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash-cert index number</a>
<b>Tree</b>	<a href="#">sha256-hash-cert</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	The index of the hash
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash-cert index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**digest-value binary**

<b>Description</b>	SHA-256 digest of an X.509 certificate
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash-cert index number digest-value binary</a>
<b>Tree</b>	<a href="#">digest-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**revocation-time string**

<b>Description</b>	Certificate revocation start time
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables variable string contents sha256-hash-cert index number revocation-time string</a>
<b>Tree</b>	<a href="#">revocation-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**uefi-variables-update**

<b>Description</b>	Update status of the UEFI Secure Boot variables PK, KEK, DB and DBx programmed in the control module compared to the UEFI variables update in the modification dataset
<b>Context</b>	<a href="#">platform trust secure-boot control slot string uefi-variables-update</a>
<b>Tree</b>	<a href="#">uefi-variables-update</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### db-update-required *boolean*

**Description** The authorized database (db) update status compared to the modification dataset true = the authorized database (db) is not up to date, update required false = the authorized database (db) is up to date

**Context** [platform trust secure-boot control slot string uefi-variables-update db-update-required boolean](#)

**Tree** [db-update-required](#)

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dbx-update-required *boolean*

**Description** The forbidden database (dbx) update status compared to the modification dataset true = the forbidden database (dbx) is not up to date, update required false = the forbidden database (dbx) is up to date

**Context** [platform trust secure-boot control slot string uefi-variables-update dbx-update-required boolean](#)

**Tree** [dbx-update-required](#)

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### kek-update-required *boolean*

**Description** The Key Exchange Key database (KEK) update status compared to the modification dataset true = the Key Exchange Key database (KEK) is not up to date, update required false = the Key Exchange Key database (KEK) is up to date

**Context** [platform trust secure-boot control slot string uefi-variables-update kek-update-required boolean](#)

**Tree** [kek-update-required](#)

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modification-dataset-db-conflict** *boolean*

<b>Description</b>	The authorized database (db) conflict status between the modification dataset and the current running image true = conflict false = no conflict
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update modification-dataset-db-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">modification-dataset-db-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modification-dataset-dbx-conflict** *boolean*

<b>Description</b>	The forbidden database (dbx) conflict status between the modification dataset and the current running image true = conflict false = no conflict
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update modification-dataset-dbx-conflict</a> <i>boolean</i>
<b>Tree</b>	<a href="#">modification-dataset-dbx-conflict</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modification-dataset-digest** *binary*

<b>Description</b>	The SHA256 digest of the modification dataset file
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update modification-dataset-digest</a> <i>binary</i>
<b>Tree</b>	<a href="#">modification-dataset-digest</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**modification-dataset-present** *boolean*

<b>Description</b>	The modification dataset is present
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update modification-dataset-present</a> <i>boolean</i>
<b>Tree</b>	<a href="#">modification-dataset-present</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### modification-dataset-valid *boolean*

<b>Description</b>	The status of the modification dataset true = the modification dataset is valid false = the modification dataset is invalid
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update modification-dataset-valid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">modification-dataset-valid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pk-update-required *boolean*

<b>Description</b>	The Platform Key (PK) update status compared to the modification dataset true = the Platform Key is not up to date, update required false = the Platform Key is up to date
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update pk-update-required</a> <i>boolean</i>
<b>Tree</b>	<a href="#">pk-update-required</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### up-to-date *boolean*

<b>Description</b>	Status of the Secure Boot variables programmed in the control module compared to the current modification dataset true = UEFI variables are up to date false = UEFI variable update required
<b>Context</b>	<a href="#">platform trust secure-boot control slot</a> <i>string</i> <a href="#">uefi-variables-update up-to-date</a> <i>boolean</i>
<b>Tree</b>	<a href="#">up-to-date</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tpm**

<b>Description</b>	Enter the tpm context
<b>Context</b>	<a href="#">platform trust tpm</a>
<b>Tree</b>	<a href="#">tpm</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**control [slot string](#)**

<b>Description</b>	TPM status, PCR indexes and certificates per control module
<b>Context</b>	<a href="#">platform trust tpm control slot string</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**slot [string](#)**

<b>Description</b>	Slot identifier for the control module. The slot identifier is the system wide unique name for the module's TPM
<b>Context</b>	<a href="#">platform trust tpm control slot string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**certificates [name string](#)**

<b>Description</b>	List of TPM certificates Three main types of certificates can be accessed via this statement, including Endorsement Key Certificate (EK), Attestation Key Certificate (AK), Device ID key Certificate (DevID)
<b>Context</b>	<a href="#">platform trust tpm control slot string certificates name string</a>
<b>Tree</b>	<a href="#">certificates</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	An arbitrary name uniquely identifying a certificate associated to a key within a TPM Endorsement Key Certificate (EK): endorsement-certificate Initial Device ID Certificate (IDevID): initial-device-id-certificate Initial Attestation Key Certificate (IAK): initial-attestation-certificate
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">certificates name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**data** *binary*

<b>Description</b>	DER encoded X.509 certificate
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">certificates name</a> <i>string</i> <a href="#">data</a> <i>binary</i>
<b>Tree</b>	<a href="#">data</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**nv-index** *number*

<b>Description</b>	NV index for the certificate
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">certificates name</a> <i>string</i> <a href="#">nv-index</a> <i>number</i>
<b>Tree</b>	<a href="#">nv-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	TPM chip self-test status
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up The TPM currently is running normally and is ready to accept and process TPM quotes</li> <li>down TPM is in a state such as startup or shutdown which precludes the processing of TPM quotes</li> </ul>



<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **tpm20-pcr-bank** [tpm20-hash-algo](#) *string*

<b>Description</b>	Specifies the list of PCRs that may be extracted for a specific Hash Algorithm A TPM2.0 bank is a set of PCRs which are extended using a particular hash algorithm
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">tpm20-pcr-bank</a> <a href="#">tpm20-hash-algo</a> <i>string</i>
<b>Tree</b>	<a href="#">tpm20-pcr-bank</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **tpm20-hash-algo** *string*

<b>Description</b>	The hash algorithm that is used to hash TPM2.0 PCRs
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">tpm20-pcr-bank</a> <a href="#">tpm20-hash-algo</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pcr-index** *number*

<b>Description</b>	List the TPM2.0 PCRs available to be extracted
<b>Context</b>	<a href="#">platform trust tpm control slot</a> <i>string</i> <a href="#">tpm20-pcr-bank</a> <a href="#">tpm20-hash-algo</a> <i>string</i> <a href="#">pcr-index</a> <i>number</i>
<b>Tree</b>	<a href="#">pcr-index</a>
<b>Range</b>	0 to 31
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## 9 qos

```

qos
+ buffer-management
+ buffer-allocation-profile name string
+ queues
+ pfc-queue pfc-queue-name reference
+ committed-burst-size number
+ maximum-burst-size number
+ maximum-pfc-reserved-share-bytes number
+ maximum-pfc-reserved-share-percentage number
+ pfc-off-threshold number
+ pfc-on-threshold number
+ use-dynamic-allocation boolean
+ queue queue-name reference
+ cbs-adaptation-rule keyword
+ committed-burst-size number
+ high-threshold-bytes number
+ interface-pool reference
+ maximum-burst-size number
+ mbs-adaptation-rule keyword
+ committed-burst-size-table
+ alt-0 number
+ alt-1 number
+ alt-2 number
+ alt-3 number
+ fp-pool-policy name string
+ mid-tier
+ mid-pool index number
+ allocation-percentage-size number
+ slope-policy reference
+ root-tier
+ default-slope-policy reference
+ root-pool index number
+ allocation-weight number
+ mid-pool-members
+ mid-pool-member index number
+ system-reserve-percentage number
+ interface-pool-policy name string
+ interface-pool index number
+ allocation-size
+ bw-proportional
+ over-subscription-factor decimal-number
+ explicit-percentage number
+ slope-policy reference
+ queue-management-profile name string
+ weight-factor number
+ wred
+ wred-slope traffic-type keyword drop-probability keyword enable-ecn boolean
+ max-drop-probability-percent number
+ max-threshold number
+ max-threshold-percent number
+ min-threshold number
+ min-threshold-percent number
+ slope-enabled boolean
- weight-factor number
+ slope-policy name string
+ wred-slope wred-profile keyword

```

```

+ max-probability number
+ max-threshold-percent number
+ min-threshold-percent number
+ slope-enabled boolean
+ classifiers
+ dot1p-policy name string
+ dot1p value number
+ de-out-profile boolean
+ drop-probability keyword
+ forwarding-class reference
+ ip-rewrite-policy reference
+ profile keyword
+ dscp-policy name string
+ dscp value (number | keyword)
+ de-out-profile boolean
+ drop-probability keyword
+ forwarding-class reference
+ ip-rewrite-policy reference
+ profile keyword
+ dscp-reclassify-policy name string
+ dscp value (number | keyword)
+ forwarding-class reference
+ profile keyword
+ mpls-traffic-class-policy name string
+ traffic-class value number
+ de-out-profile boolean
+ drop-probability keyword
+ forwarding-class reference
+ ip-rewrite-policy reference
+ profile keyword
+ multifeild-classifier name string
+ entry sequence-id number
+ action
+ drop-probability keyword
+ forwarding-class reference
+ profile keyword
+ rewrite
+ set-dscp number
+ match
+ ipv4
+ destination-ip
+ address string
+ mask string
+ prefix string
+ prefix-list name reference
+ dscp-set (number | keyword)
+ first-fragment boolean
+ fragment boolean
+ icmp
+ code number
+ type (number | keyword)
+ protocol (number | keyword)
+ source-ip
+ address string
+ mask string
+ prefix string
+ prefix-list name reference
+ ipv6
+ destination-ip
+ address string
+ mask string
+ prefix string
+ prefix-list name reference
+ dscp-set (number | keyword)

```

```

+ icmp6
+ code number
+ type (number | keyword)
+ next-header (number | keyword)
+ source-ip
+ address string
+ mask string
+ prefix string
+ prefix-list name reference
+ transport
+ destination-port
+ operator keyword
+ range
+ end (number | keyword)
+ start (number | keyword)
+ value (number | keyword)
+ source-port
+ operator keyword
+ range
+ end (number | keyword)
+ start (number | keyword)
+ value (number | keyword)
+ tcp-flags string
- tcam-entries
- forwarding-complex complex-identifier string
- input-total number
- output-total number
- single-instance number
+ type keyword
+ vxlan-default reference
+ explicit-congestion-notification
+ ecn-dscp-policy reference
+ forwarding-classes
+ forwarding-class name string
+ forwarding-class-index number
+ output
+ multicast-queue reference
+ queue reference
+ slope-policy reference
+ unicast-queue reference
+ input-class-map name string
+ forwarding-class name reference
+ policers
+ broadcast-policer reference
+ multicast-policer reference
+ unicast-policer reference
+ unknown-unicast-policer reference
+ interfaces
+ interface interface-id string
+ input
+ classifiers
+ classifier type keyword
+ name reference
+ default
+ drop-probability keyword
+ forwarding-class reference
+ profile keyword
+ dot1p-policy reference
+ dscp-policy reference
+ ipv4-dscp-policy reference
+ ipv6-dscp-policy reference
+ lsr-use-dscp boolean
+ match-qinq-dot1p keyword
+ mpls-traffic-class-policy reference

```

```

+ tos-rewrite-state keyword
+ input-class-map reference
+ pfc-buffer-allocation-profile reference
+ policer-policies
- parent-policer
- burst-allowance number
- rate-kbps number
- threshold-separation number
- policer-policer-id reference
- cir-policer-threshold-separation-policy string
- committed-burst-size number
- committed-rate-kbps number
- eir-policer-threshold-separation-policy string
- excess-burst-size number
- excess-rate-kbps number
- forwarding-class name reference
- forwarding-type keyword
- maximum-burst-size number
- operational-separation-thresholds input-profile keyword
- cir-operational-separation-threshold number
- eir-operational-separation-threshold number
- pir-operational-separation-threshold number
- peak-rate-kbps number
- pir-policer-threshold-separation-policy string
- policer-statistics
- aggregate-statistics
- accepted-in-octets number
- accepted-in-packets number
- accepted-inplus-octets number
- accepted-inplus-packets number
- accepted-out-octets number
- accepted-out-packets number
- exceed-octets number
- exceed-packets number
- last-clear string
- per-lag-member-statistics
- linecard slot number
- forwarding-complex name keyword
- accepted-in-octets number
- accepted-in-packets number
- accepted-inplus-octets number
- accepted-inplus-packets number
- accepted-out-octets number
- accepted-out-packets number
- exceed-octets number
- exceed-packets number
- last-clear string
+ policer-policy reference
+ policer-templates
- policer sequence-id number
- committed-burst-size number
- committed-rate-kbps number
- maximum-burst-size number
- peak-rate-kbps number
- statistics
- accepted-octets number
- accepted-packets number
- committed-octets number
- committed-packets number
- exceeding-octets number
- exceeding-packets number
- last-clear string
- violating-octets number
- violating-packets number

```

```

    + policer-template reference
+ interface-ref
  + interface reference
  + subinterface reference
+ output
  + buffer-allocation-profile reference
  + dscp-reclassify-policy reference
  - interface-pool index number
    - operational-size number
    - used number
  + interface-pool-policy reference
  + output-class-map reference
  - output-class-map-pending reference
  + queues
    + queue queue-name reference
    - active-queue-management
      - wred-slope traffic-type keyword drop-probability keyword enable-
ecn boolean
      - drop boolean
      - max-probability number
      - max-threshold-bytes number
      - min-threshold-bytes number
    - forwarding-class string
    - queue-depth
      - average-1 number
      - average-15 number
      - average-5 number
      - committed-burst-size number
      - high-threshold-bytes number
      - high-watermark-1 number
      - high-watermark-15 number
      - high-watermark-5 number
      - last-high-threshold-time string
      - maximum-burst-size number
      - missed-polling-intervals number
    + queue-management-profile reference
    - queue-statistics
      - aggregate-statistics
        - ecn-marked-octets number
        - ecn-marked-packets number
        - egq-dropped-octets number
        - egq-dropped-packets number
        - exceed-profile
          - dropped-octets number
          - dropped-packets number
          - transmitted-octets number
          - transmitted-packets number
        - in-plus-profile
          - dropped-octets number
          - dropped-packets number
          - transmitted-octets number
          - transmitted-packets number
        - in-profile
          - dropped-octets number
          - dropped-packets number
          - transmitted-octets number
          - transmitted-packets number
        - last-clear string
      - out-profile
        - dropped-octets number
        - dropped-packets number
        - transmitted-octets number
        - transmitted-packets number
      - queue-depth

```

```

- high-threshold-bytes number
- last-high-threshold-time string
- virtual-output-queue slot number
- high-drop-probability
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- low-drop-probability
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- medium-drop-probability
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- queue-depth
  - high-threshold-bytes number
  - last-high-threshold-time string
- per-lag-member-statistics
- member-interface member-interface-name string
- ecn-marked-octets number
- ecn-marked-packets number
- egq-dropped-octets number
- egq-dropped-packets number
- exceed-profile
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- in-plus-profile
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- in-profile
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- out-profile
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- queue-depth
  - high-threshold-bytes number
  - last-high-threshold-time string
- virtual-output-queue slot number
- high-drop-probability
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- low-drop-probability
  - dropped-octets number
  - dropped-packets number
  - transmitted-octets number
  - transmitted-packets number
- medium-drop-probability
  - dropped-octets number
  - dropped-packets number

```

```

        - transmitted-octets number
        - transmitted-packets number
    - queue-depth
        - high-threshold-bytes number
        - last-high-threshold-time string
    - queue-type keyword
    - scheduling
        - peak-rate-bps number
        - peak-rate-percent number
        - scheduling-class number
        - strict-priority boolean
        - weight number
+ rewrite-rules
+ dot1p-policy reference
+ dscp-policy reference
+ dscp-rewrite
    + force-rewrite-trusted boolean
+ ipv4-dscp-policy reference
+ ipv6-dscp-policy reference
+ mpls-traffic-class-policy reference
+ qinq-rewrite-outer-only boolean
+ scheduler
    - queue-scheduler sequence-id number
        - interface-instance interface-name string
            - peak-rate-kbps number
        - queue-inputs string
        - scheduler-inputs number
    + queue-scheduling-policy reference
    - sched-class-scheduler sequence-id number
        - interface-instance interface-name string
            - peak-rate-kbps number
        - sched-class-inputs number
        - scheduler-inputs number
    + sched-class-scheduling-policy reference
+ scheduler-policy reference
    - scheduling-resources-pools
        - interface-group-resource-pool number
        - resource-set-pool number
+ pfc
    - deadlock-detection-timer number
    - oper-state keyword
+ pfc-enable boolean
+ pfc-mapping-profile reference
- pfc-queue pfc-queue-name reference
    - forwarding-class reference
    - pfc-committed-burst-size number
    - pfc-maximum-burst-size number
    - pfc-maximum-pfc-reserved-share number
    - pfc-off-threshold-bytes number
    - pfc-on-threshold-bytes number
- source-pfc-mac string
- statistics
    - last-clear string
    - pfc-priority index number
        - deadlock-recovery-occurrences number
        - pfc-pause-frames-generated number
        - pfc-pause-frames-received number
        - pfc-transitions number
    - total-packet-pfc-discards number
    - total-pfc-pause-frames-generated number
    - total-pfc-pause-frames-received number
+ linecard slot number
+ forwarding-complex name keyword
+ input

```



```

    + pfc-buffer-reservation number
    - pfc-reserved-buffer-size number
  + output
    + fp-pool-policy reference
+ output-class-map name string
+ forwarding-class name reference
  + queue
    + name reference
    + re-direct-to keyword
    + slope-policy reference
+ pfc-mapping-profile name string
+ received-pfc-pause-frames
  + deadlock
    + detection-timer number
    + enable boolean
    + recovery-timer number
  + queue queue-name reference
    + enable-pfc boolean
    + pfc-pause-frame-priority number
+ received-traffic
  + unicast-mapping
    + pfc-queue pfc-queue-name reference
    + dot1p number
    + forwarding-class reference
    + pfc-pause-frame-priority number
+ policer-policies
+ parent-policer-threshold-policy name string
  + threshold-separation number
+ policer-policy name string
  + parent-policer
    + inputs
      + policer policer-id reference
      + priority-level number
    + parent-policer-threshold-policy reference
  + rate
    + adaptation-rule keyword
    + burst-allowance number
    + peak-rate-kbps number
  + policer policer-id number
    + adaptation-rules
      + committed-burst-size keyword
      + committed-rate keyword
      + excess-burst-size keyword
      + excess-rate keyword
      + maximum-burst-size keyword
      + peak-rate keyword
    + algorithm-type keyword
    + committed-burst-size number
    + committed-rate-kbps number
    + excess-burst-size number
    + excess-rate-kbps number
    + maximum-burst-size number
    + packet-length-adjustment
      + add number
      + subtract number
    + peak-rate-kbps number
    + pir-threshold-separation
      + inplus-separated boolean
    + statistics-mode keyword
    + violate-action keyword
- threshold-separation-policies
  - threshold-separation-policy name string
    - input-profile input-profile keyword
    - threshold-factor decimal-number

```

```

+ policer-templates
+ policer-template name string
+ policer sequence-id number
+ committed-burst-size number
+ committed-rate-kbps number
+ exceed-action
+ drop-probability keyword
+ forwarding-class fc reference
+ forwarding-type keyword
+ maximum-burst-size number
+ peak-rate-kbps number
+ violate-action
+ drop
+ drop-probability keyword
+ statistics-mode keyword
+ preserve-dscp boolean
+ queues
+ pfc-queue pfc-queue-name string
+ queue-index number
+ queue name string
+ queue-index number
+ queue-depth-sampling
+ admin-state keyword
+ polling-interval number
+ resource-management
+ drop-zones
+ multicast-priority resource-priority number
+ buffer-segment-drop-zone number
+ header-buffer-drop-zone number
+ packet-id-drop-zone number
+ unicast-priority resource-priority number
+ buffer-segment-drop-zone number
+ header-buffer-drop-zone number
+ packet-id-drop-zone number
+ forwarding-class-resource-priority
+ forwarding-class name reference
+ profile profile-name keyword
+ multicast-resource-priority number
+ unicast-resource-priority number
+ resource-utilization-thresholds
+ threshold index number
+ buffer-segment
+ falling-threshold-value decimal-number
+ rising-threshold-value decimal-number
+ header-buffer
+ falling-threshold-value decimal-number
+ rising-threshold-value decimal-number
+ packet-id
+ falling-threshold-value decimal-number
+ rising-threshold-value decimal-number
+ rewrite-rules
+ dot1p-policy name string
+ map forwarding-class reference
+ dot1p number
+ drop-probability drop-probability keyword
+ dot1p number
+ inner-de boolean
+ inner-dot1p number
+ outer-de boolean
+ outer-dot1p number
+ profile profile keyword
+ inner-de boolean
+ inner-dot1p number
+ outer-de boolean

```

```

    + outer-dot1p number
+ dscp-policy name string
  + map forwarding-class reference
    + drop-probability drop-probability keyword
    + dscp (number | keyword)
  + dscp (number | keyword)
  + profile profile keyword
    + dscp (number | keyword)
+ ip-rewrite-policy name string
  + exceed
    + dscp (number | keyword)
    + precedence number
  + in
    + dscp (number | keyword)
    + precedence number
  + in-plus
    + dscp (number | keyword)
    + precedence number
  + out
    + dscp (number | keyword)
    + precedence number
+ mpls-traffic-class-policy name string
  + map forwarding-class reference
    + drop-probability drop-probability keyword
    + traffic-class number
  + profile profile keyword
    + traffic-class number
    + traffic-class number
+ vlan-outer-header-dscp-policy reference
+ scheduler-policies
+ queue-scheduling-policy name string
  + queue queue-name reference
    + scheduling
      + packet-length-adjustment
        + add number
      + scheduling-class number
      + weight number
  + scheduler sequence-id number
    + burst-allowance number
    + inputs
      + inputs keyword
      + queue reference
    + rate
      + peak-rate-kbps number
      + peak-rate-percentage number
      + pir-adaptation-rule keyword
    + threshold-separation number
    + tier number
+ sched-class-scheduling-policy name string
  + scheduler sequence-id number
    + burst-allowance number
    + inputs
      + inputs keyword
      + scheduling-class number
    + rate
      + peak-rate-kbps number
      + peak-rate-percentage number
      + pir-adaptation-rule keyword
    + threshold-separation number
    + tier number
+ scheduler-policy name string
  + scheduler sequence number
    + input id string
      + input-type keyword

```

```
    + peak-rate-percent number
    + queue-name reference
    + weight number
  + priority keyword
+ scheduling-priority-mapping-table
  + scheduling-class index number
  + scheduling-priority number
- system-generated-traffic
  - dscp value (number | keyword)
  - forwarding-class reference
  - profile keyword
```

## 9.1 qos Descriptions

### qos

<b>Description</b>	Top-level container for QoS data
<b>Context</b>	<a href="#">qos</a>
<b>Tree</b>	<a href="#">qos</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### buffer-management

<b>Description</b>	Container for the list of configured queue management profiles
<b>Context</b>	<a href="#">qos buffer-management</a>
<b>Tree</b>	<a href="#">buffer-management</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### buffer-allocation-profile *name string*

<b>Description</b>	The name of a buffer-allocation-profile
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name string</a>
<b>Tree</b>	<a href="#">buffer-allocation-profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	Unique string name used for the buffer-allocation-profile
--------------------	---

<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queues

<b>Description</b>	Buffer allocation parameters for individual queues
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues</a>
<b>Tree</b>	<a href="#">queues</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [pfc-queue](#) [pfc-queue-name](#) *reference*

<b>Description</b>	List of pfc-queues
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">pfc-queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## [pfc-queue-name](#) *reference*

<b>Description</b>	The pfc-queue name
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos queues</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**committed-burst-size** *number*

<b>Description</b>	Reserved amount of buffer memory available for the given pfc-queue
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">committed-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Range</b>	1536 to 262144
<b>Default</b>	102400
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**maximum-burst-size** *number*

<b>Description</b>	Maximum amount of shared buffer memory available for the given pfc-queue
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">maximum-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-burst-size</a>
<b>Default</b>	51200
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**maximum-pfc-reserved-share-bytes** *number*

<b>Description</b>	Maximum level the pfc-queue can take from pfc-reserved buffer configured per given forwarding-complex expressed as bytes. If this value is configured, maximum-pfc-reserved-share-percentage value is ignored
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">maximum-pfc-reserved-share-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-pfc-reserved-share-bytes</a>
<b>Range</b>	0 to 104857600
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**maximum-pfc-reserved-share-percentage** *number*

<b>Description</b>	Maximum level the pfc-queue can take from pfc-reserved buffer configured per given forwarding-complex
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">maximum-pfc-reserved-share-percentage</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-pfc-reserved-share-percentage</a>
<b>Range</b>	0 to 100
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pfc-off-threshold** *number*

<b>Description</b>	Defines the pfc-queue depth at which pfc-pause-frames will stop be generated. It is expressed as percentage of maximum-burst-size or committed-burst-size, respectively
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-off-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-off-threshold</a>
<b>Range</b>	0 to 100
<b>Default</b>	80
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pfc-on-threshold** *number*

<b>Description</b>	Defines the pfc-queue depth at which pfc-pause-frames generation will start. It is expressed as percentage of maximum-burst-size or committed-burst-size, respectively
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-on-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-on-threshold</a>
<b>Range</b>	0 to 100
<b>Default</b>	100
<b>Configurable</b>	True



**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **use-dynamic-allocation** *boolean*

**Description** Enables dynamic allocation of the buffer space  
MBS statement is ignored, if enabled

**Context** [qos buffer-management buffer-allocation-profile name](#) *string* [queues pfc-queue pfc-queue-name](#) *reference* [use-dynamic-allocation](#) *boolean*

**Tree** [use-dynamic-allocation](#)

**Configurable** True

**Platforms** qos-pfc-dynamic-buffer-allocation

### **queue** [queue-name](#) *reference*

**Description** List of queues

**Context** [qos buffer-management buffer-allocation-profile name](#) *string* [queues queue](#) [queue-name](#) *reference*

**Tree** [queue](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **queue-name** *reference*

**Description** The queue name

**Context** [qos buffer-management buffer-allocation-profile name](#) *string* [queues queue](#) [queue-name](#) *reference*

**Reference** [qos queues queue name](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cbs-adaptation-rule** *keyword*

<b>Description</b>	Defines how the user-configured values will be adjusted to values defined by committed-burst-size-table
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">cbs-adaptation-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">cbs-adaptation-rule</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower The configured values is aligned with closest lower HW value.</li> <li>higher The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**committed-burst-size** *number*

<b>Description</b>	Committed queue length expressed in bytes
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">committed-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H4, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**high-threshold-bytes** *number*

<b>Description</b>	<p>The queue depth that, when crossed in a rising direction, triggers a hardware interrupt and a recording of the current system time.</p> <p>The default value of 0 disables the functionality.</p> <p>On IXR-6/10 this parameter applies to a set of VOQs (and therefore to unicast traffic only). On 7220-D2/D3/H2/H3 this parameter applies to a unicast queue only; the configuration of this leaf is ignored when the queue-template is attached to a queue with queue-type other than unicast.</p> <p>On 7220-D2/D3 the threshold is rounded up the nearest multiple of 2048 bytes. On IXR-6/10 the threshold is rounded up to the nearest multiple of</p>
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	4096 bytes. On 7220-H2/H3 the threshold is rounded up to the nearest multiple of 254 bytes
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">high-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### interface-pool *reference*

<b>Description</b>	Interface-pool the queue is assigned to at subinterface level
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">interface-pool</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-pool</a>
<b>Reference</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-burst-size *number*

<b>Description</b>	<p>Maximum amount of shared buffer memory available to the queue.</p> <p>On IXR-6/10 this parameter applies to a set of VOQs. If the configured value is 0 or no value is configured the limit is 256 MB (268435456 bytes), however the use of 'alpha' may limit the effective value to less than 256 MB. A configured non-zero value sets a static limit without 'alpha'.</p> <p>On 7220-D2/D3/D5/H2/H3 this parameter applies to an egress queue and the default value of zero instructs the forwarding chip to apply its own limit based on 'alpha'. A non-zero value disables 'alpha'. The alpha value is 5 (0.25 multiplier of shared buffer space) for unicast queues and 4 (0.125 multiplier of shared buffer space) for multicast queues.</p> <p>On 7730 this parameter applies to egress-queue and setting value to 0 means default value (still need to determine that)</p> <p>Must be non-zero/non-default in order to add the active-queue-management presence container</p>
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">maximum-burst-size</a> <i>number</i>

<b>Tree</b>	<a href="#">maximum-burst-size</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mbs-adaptation-rule** *keyword*

<b>Description</b>	Defines how the user-configured values will be adjusted to available hardware values
<b>Context</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i> <a href="#">queues queue queue-name</a> <i>reference</i> <a href="#">mbs-adaptation-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mbs-adaptation-rule</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower The configured values is aligned with closest lower HW value.</li> <li>higher The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **committed-burst-size-table**

<b>Description</b>	Defines possible committed-burst sizes
<b>Context</b>	<a href="#">qos buffer-management committed-burst-size-table</a>
<b>Tree</b>	<a href="#">committed-burst-size-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **alt-0** *number*

<b>Description</b>	ALT-0 committed-burst-size
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<b>Context</b>	<a href="#">qos buffer-management committed-burst-size-table alt-0</a> <i>number</i>
<b>Tree</b>	<a href="#">alt-0</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**alt-1** *number*

<b>Description</b>	ALT-1 committed-burst-size
<b>Context</b>	<a href="#">qos buffer-management committed-burst-size-table alt-1</a> <i>number</i>
<b>Tree</b>	<a href="#">alt-1</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**alt-2** *number*

<b>Description</b>	ALT-2 committed-burst-size
<b>Context</b>	<a href="#">qos buffer-management committed-burst-size-table alt-2</a> <i>number</i>
<b>Tree</b>	<a href="#">alt-2</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**alt-3** *number*

<b>Description</b>	ALT-3 committed-burst-size
<b>Context</b>	<a href="#">qos buffer-management committed-burst-size-table alt-3</a> <i>number</i>
<b>Tree</b>	<a href="#">alt-3</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fp-pool-policy** *name string*

**Description** List of fp-pool-policies

**Context** [qos buffer-management fp-pool-policy name string](#)

**Tree** [fp-pool-policy](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 3

### **name** *string*

**Description** Unique string name used for the fp-pool-policy. There is a default fp-pool-policy named 'default', as a reserved name not usable for user-defined fp-pool-policies

**Context** [qos buffer-management fp-pool-policy name string](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mid-tier**

**Description** Mid-pool parameters definition

**Context** [qos buffer-management fp-pool-policy name string mid-tier](#)

**Tree** [mid-tier](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mid-pool** *index number*

**Description** Mid-pool definition

**Context** [qos buffer-management fp-pool-policy name string mid-tier mid-pool index number](#)

**Tree** [mid-pool](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Mid-pool index
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">mid-tier mid-pool index number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**allocation-percentage-size number**

<b>Description</b>	The size of the mid-pool as a percentage of root-pool
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">mid-tier mid-pool index number</a> <a href="#">allocation-percentage-size number</a>
<b>Tree</b>	<a href="#">allocation-percentage-size</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**slope-policy reference**

<b>Description</b>	The slope-policy attached to the given mid-pool
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">mid-tier mid-pool index number</a> <a href="#">slope-policy reference</a>
<b>Tree</b>	<a href="#">slope-policy</a>
<b>Default</b>	default
<b>Reference</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**root-tier**

<b>Description</b>	Parameters related to root-tier buffers
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">root-tier</a>
<b>Tree</b>	<a href="#">root-tier</a>
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### default-slope-policy *reference*

**Description** Slope-policy associated with all root-tier buffer pools

**Context** [qos buffer-management fp-pool-policy name](#) *string* root-tier default-slope-policy *reference*

**Tree** [default-slope-policy](#)

**Default** default

**Reference** [qos buffer-management slope-policy name](#) *string*

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### root-pool *index number*

**Description** List of root-tier pools

**Context** [qos buffer-management fp-pool-policy name](#) *string* root-tier root-pool *index number*

**Tree** [root-pool](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### *index number*

**Description** Root-pool index

**Context** [qos buffer-management fp-pool-policy name](#) *string* root-tier root-pool *index number*

**Range** 0 to 4

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### allocation-weight *number*

**Description** The amount of the egress buffer space allocated to this root-pool. The weight expresses the relative amount of buffer space taking into account the weight of other root-pools.

The buffer divided between individual root-pools is after reserved portion has been subtracted from the total buffer size



<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">root-tier</a> <a href="#">root-pool index number</a> <a href="#">allocation-weight</a> <i>number</i>
<b>Tree</b>	<a href="#">allocation-weight</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### mid-pool-members

<b>Description</b>	List of mid-pool members participating in this given root-pool
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">root-tier</a> <a href="#">root-pool index number</a> <a href="#">mid-pool-members</a>
<b>Tree</b>	<a href="#">mid-pool-members</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### mid-pool-member [index number](#)

<b>Description</b>	Mid-pool member
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">root-tier</a> <a href="#">root-pool index number</a> <a href="#">mid-pool-members</a> <a href="#">mid-pool-member</a> <a href="#">index number</a>
<b>Tree</b>	<a href="#">mid-pool-member</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### [index number](#)

<b>Description</b>	Mid-pool index
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">root-tier</a> <a href="#">root-pool index number</a> <a href="#">mid-pool-members</a> <a href="#">mid-pool-member</a> <a href="#">index number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-reserve-percentage** *number*

<b>Description</b>	The amount of the global buffer-pool reserved for system generated traffic expressed as percentage of total available buffer space. The sum of all root-pools and system-reserved has to be 100%
<b>Context</b>	<a href="#">qos buffer-management fp-pool-policy name</a> <i>string</i> <a href="#">system-reserve-percentage</a> <i>number</i>
<b>Tree</b>	<a href="#">system-reserve-percentage</a>
<b>Range</b>	0 to 100
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-pool-policy** *name string*

<b>Description</b>	List of interface-pool policies
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface-pool-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	64

**name** *string*

<b>Description</b>	Unique string name used for the interface-pool-policy
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-pool** *index number*

<b>Description</b>	List of interface-pools. The interface-pools are directly mapped to mid-pools in 1:1 fashion
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index</a> <i>number</i>
<b>Tree</b>	<a href="#">interface-pool</a>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Enter the index context
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**allocation-size**

<b>Description</b>	Interface-pool size definition
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number allocation-size</a>
<b>Tree</b>	<a href="#">allocation-size</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**bw-proportional**

<b>Description</b>	Defines how the mid-pool size is shared between individual interface-pools taking into account interface-speed
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number allocation-size bw-proportional</a>
<b>Tree</b>	<a href="#">bw-proportional</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**over-subscription-factor *decimal-number***

<b>Description</b>	Factor defining how much of the over-subscription for the given interface-pool is allowed, when its size is calculated as a proportion of the corresponding interface-speed.  This parameter is ignored whenever 'explicit-percentage' is set to non-zero value
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<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number</a> <a href="#">allocation-size</a> <a href="#">bw-proportional</a> <a href="#">over-subscription-factor</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">over-subscription-factor</a>
<b>Range</b>	0 to 10
<b>Default</b>	1.25
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **explicit-percentage** *number*

<b>Description</b>	Interface-pool size as percentage of mid-pool. The value equal '0' means that bw-proportional distribution is used
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number</a> <a href="#">allocation-size</a> <a href="#">explicit-percentage</a> <i>number</i>
<b>Tree</b>	<a href="#">explicit-percentage</a>
<b>Range</b>	0 to 100
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **slope-policy** *reference*

<b>Description</b>	Slope policy associated with the given interface-pool
<b>Context</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i> <a href="#">interface-pool index number</a> <a href="#">slope-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">slope-policy</a>
<b>Default</b>	default
<b>Reference</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **queue-management-profile** *name string*

<b>Description</b>	The name of a queue management profile
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i>
<b>Tree</b>	<a href="#">queue-management-profile</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **name** *string*

<b>Description</b>	Unique string name used for the queue management profile
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **weight-factor** *number*

<b>Description</b>	Weight factor to use in the calculation of the current (average weighted) queue depth
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">weight-factor</a> <i>number</i>
<b>Tree</b>	<a href="#">weight-factor</a>
<b>Range</b>	0 to 15
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **wred**

<b>Description</b>	Configuration and operational state parameters relating to Weighted Random Early Detection (WRED)
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred</a>
<b>Tree</b>	<a href="#">wred</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### wred-slope *traffic-type keyword drop-probability keyword enable-ecn boolean*

**Description** List of WRED slopes

**Context** [qos buffer-management queue-management-profile name string wred wred-slope traffic-type keyword drop-probability keyword enable-ecn boolean](#)

**Tree** [wred-slope](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### traffic-type *keyword*

**Description** The traffic type to which the WRED slope applies

**Context** [qos buffer-management queue-management-profile name string wred wred-slope traffic-type keyword drop-probability keyword enable-ecn boolean](#)

**Options**

- tcp  
Refers to IPv4/IPv6 packets with a protocol/next-header indicating a value of 6
- non-tcp  
Refers to all packets that are not IPv4/IPv6 packets with a protocol/next-header indicating a value of 6
- all  
Refers to all traffic, whether it is TCP or non-TCP

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### drop-probability *keyword*

**Description** The drop probability to which the WRED slope applies

**Context** [qos buffer-management queue-management-profile name](#) *string* [wred wred-slope traffic-type](#) *keyword* [drop-probability](#) *keyword* [enable-ecn](#) *boolean*

**Options**

- low  
Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green
- medium  
Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow
- high  
Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red
- all  
All traffic, consisting of traffic marked low, medium and high drop-probability

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**enable-ecn** *boolean***Description**

When this leaf is true and the number of packets in the queue is between the minimum threshold and the maximum threshold, if the ECN field on the packet indicates that the endpoints are ECN capable and the WRED algorithm determines that the packet should have been dropped based on the drop probability, the CE bits for the packet are changed to 1, and the packet is transmitted. When set to false, the such packets will be discarded based on wred-slope

**Context**

[qos buffer-management queue-management-profile name](#) *string* [wred wred-slope traffic-type](#) *keyword* [drop-probability](#) *keyword* [enable-ecn](#) *boolean*

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**max-drop-probability-percent** *number***Description**

The probability with which packets are dropped or marked at max-threshold

<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">max-drop-probability-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">max-drop-probability-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **max-threshold** *number*

<b>Description</b>	The maximum threshold parameter for a RED-managed queue. When the average queue length exceeds the max-threshold, the packets are dropped (or marked if ECN is enabled).  When both, 'drop' and 'ecn-enable' flags are set to false, packets will be drop only if the mbs of the queue is reached
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">max-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">max-threshold</a>
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **max-threshold-percent** *number*

<b>Description</b>	The percentage of the MBS that corresponds to the WRED maximum threshold parameter
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">max-threshold-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">max-threshold-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **min-threshold** *number*

<b>Description</b>	The minimum threshold parameter for a RED-managed queue. When the average queue length is less than min-threshold, the packets are admitted to the queue (without any ECN marking change)
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">min-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">min-threshold</a>
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **min-threshold-percent** *number*

<b>Description</b>	The percentage of the MBS that corresponds to the WRED minimum threshold parameter
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">min-threshold-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">min-threshold-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **slope-enabled** *boolean*

<b>Description</b>	Reads true if traffic is dropped by WRED
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">slope-enabled</a> <i>boolean</i>
<b>Tree</b>	<a href="#">slope-enabled</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **weight-factor** *number*

<b>Description</b>	Actual Weight factor used in the calculation of the current (average weighted) queue depth
<b>Context</b>	<a href="#">qos buffer-management queue-management-profile name</a> <i>string</i> <a href="#">wred wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">weight-factor</a> <i>number</i>
<b>Tree</b>	<a href="#">weight-factor</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **slope-policy** [name](#) *string*

<b>Description</b>	List of slope-policies
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i>
<b>Tree</b>	<a href="#">slope-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	64

### **name** *string*

<b>Description</b>	Unique string name used for the slope-policy
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**wred-slope** [wred-profile](#) *keyword*

<b>Description</b>	Enter the wred-slope list instance
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">wred-slope</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**wred-profile** *keyword*

<b>Description</b>	The key for individual wred-slopes
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in The key for wred-slope corresponding to packets with profile 'in'</li> <li>• out The key for wred-slope corresponding to packets with profile 'out'</li> <li>• exceed The key for wred-slope corresponding to packets with profile 'exceed'</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-probability** *number*

<b>Description</b>	The drop probability at max-threshold level for the corresponding wred-slope
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i> <a href="#">max-probability</a> <i>number</i>
<b>Tree</b>	<a href="#">max-probability</a>
<b>Range</b>	0 to 100
<b>Default</b>	80
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-threshold-percent** *number*

<b>Description</b>	The buffer threshold defining when the drop-probability reaches its max-probability value for the corresponding wred-slope
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i> <a href="#">max-threshold-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">max-threshold-percent</a>
<b>Range</b>	0 to 100
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**min-threshold-percent** *number*

<b>Description</b>	The buffer threshold defining when the drop-probability starts rising from zero for the corresponding wred-slope
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i> <a href="#">min-threshold-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">min-threshold-percent</a>
<b>Range</b>	0 to 100
<b>Default</b>	85
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**slope-enabled** *boolean*

<b>Description</b>	Enables/disables the corresponding wred-slope
<b>Context</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i> <a href="#">wred-slope</a> <a href="#">wred-profile</a> <i>keyword</i> <a href="#">slope-enabled</a> <i>boolean</i>
<b>Tree</b>	<a href="#">slope-enabled</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**classifiers**

<b>Description</b>	Enter the classifiers context
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<b>Context</b>	<a href="#">qos classifiers</a>
<b>Tree</b>	<a href="#">classifiers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dot1p-policy** [name string](#)

<b>Description</b>	Enter the dot1p-policy list instance
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name string</a>
<b>Tree</b>	<a href="#">dot1p-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** [string](#)

<b>Description</b>	User-configured name for a 802.1p priority code point mapping policy The name 'default' is reserved for the system default dot1p mapping policy
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dot1p** [value number](#)

<b>Description</b>	Enter the dot1p list instance
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name string dot1p value number</a>
<b>Tree</b>	<a href="#">dot1p</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value number**

<b>Description</b>	Enter the value context
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**de-out-profile boolean**

<b>Description</b>	The discard-eligibility to which dot1p value is mapped
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value number</a> <a href="#">de-out-profile boolean</a>
<b>Tree</b>	<a href="#">de-out-profile</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**drop-probability keyword**

<b>Description</b>	The drop probability to which the dot1p value is mapped
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value number</a> <a href="#">drop-probability keyword</a>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>• medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>• high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value</a> <i>number</i> <a href="#">forwarding-class reference</a>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-rewrite-policy *reference*

<b>Description</b>	The ip-rewrite-policy to be used for this dot1p value
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value</a> <i>number</i> <a href="#">ip-rewrite-policy reference</a>
<b>Tree</b>	<a href="#">ip-rewrite-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile *keyword*

<b>Description</b>	The profile to which the dot1p value is mapped
<b>Context</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i> <a href="#">dot1p value</a> <i>number</i> <a href="#">profile keyword</a>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> </ul>

	<ul style="list-style-type: none"> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### dscp-policy *name string*

<b>Description</b>	Enter the dscp-policy list instance
<b>Context</b>	<a href="#">qos classifiers dscp-policy name string</a>
<b>Tree</b>	<a href="#">dscp-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	User-configured name for a DSCP mapping policy The name 'default' is reserved for the system default DSCP mapping policy
<b>Context</b>	<a href="#">qos classifiers dscp-policy name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dscp *value (number | keyword)*

<b>Description</b>	Enter the dscp list instance
<b>Context</b>	<a href="#">qos classifiers dscp-policy name string dscp value (number   keyword)</a>
<b>Tree</b>	<a href="#">dscp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250



IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730  
SXR-1d-32D, 7730 SXR-1x-44S

**value** (*number* | *keyword*)

<b>Description</b>	Enter the value context
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> )
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**de-out-profile** *boolean*

<b>Description</b>	The discard-eligibility to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">de-out-profile</a> <i>boolean</i>
<b>Tree</b>	<a href="#">de-out-profile</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**drop-probability** *keyword*

<b>Description</b>	The drop probability to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**forwarding-class** *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-rewrite-policy *reference*

<b>Description</b>	The ip-rewrite-policy to be used for this dscp-value
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ip-rewrite-policy reference</a>
<b>Tree</b>	<a href="#">ip-rewrite-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile *keyword*

<b>Description</b>	The profile to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i> <a href="#">dscp value</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">profile keyword</a>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp-reclassify-policy** *name string*

<b>Description</b>	Egress DSCP reclassification policy
<b>Context</b>	<a href="#">qos classifiers dscp-reclassify-policy name string</a>
<b>Tree</b>	<a href="#">dscp-reclassify-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Name of egress dscp-reclassifier policy
<b>Context</b>	<a href="#">qos classifiers dscp-reclassify-policy name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp** *value (number | keyword)*

<b>Description</b>	Enter the dscp list instance
<b>Context</b>	<a href="#">qos classifiers dscp-reclassify-policy name string dscp value (number   keyword)</a>
<b>Tree</b>	<a href="#">dscp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *(number | keyword)*

<b>Description</b>	Enter the value context
<b>Context</b>	<a href="#">qos classifiers dscp-reclassify-policy name string dscp value (number   keyword)</a>

<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos classifiers dscp-reclassify-policy name string dscp value (number   keyword) forwarding-class reference</a>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name string</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **profile** *keyword*

**Description** The profile to which the DSCP value is mapped

**Context** [qos classifiers dscp-reclassify-policy name string dscp value \(number | keyword\) profile keyword](#)

**Tree** [profile](#)

**Options**

- in  
Defines packet profile as an input for colour-aware policing at ingress
- out  
Defines packet profile as an input for colour-aware policing at ingress
- exceed  
Defines packet profile as an input for colour-aware policing at ingress
- in-plus  
Defines packet profile as an input for colour-aware policing at ingress
- in-low  
Defines packet profile as an input for colour-blind policing at ingress
- out-low  
Defines packet profile as an input for colour-blind policing at ingress

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-traffic-class-policy** *name string*

**Description** Enter the mpls-traffic-class-policy list instance

**Context** [qos classifiers mpls-traffic-class-policy name string](#)

**Tree** [mpls-traffic-class-policy](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	User-configured name for an MPLS traffic-class mapping policy The name 'default' is reserved for the system default MPLS TC mapping policy
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-class** *value number*

<b>Description</b>	Enter the traffic-class list instance
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class</a> <i>value number</i>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *number*

<b>Description</b>	A single traffic-class value
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class</a> <i>value number</i>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**de-out-profile** *boolean*

<b>Description</b>	The discard-eligibility to which the traffic-class value is mapped
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class</a> <i>value number</i> <a href="#">de-out-profile</a> <i>boolean</i>
<b>Tree</b>	<a href="#">de-out-profile</a>
<b>Default</b>	true

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### drop-probability *keyword*

<b>Description</b>	The drop probability to which the traffic-class value is mapped
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class value</a> <i>number</i> <a href="#">drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class value</a> <i>number</i> <a href="#">forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip-rewrite-policy *reference*

<b>Description</b>	The ip-rewrite-policy to be used for this traffic-class value
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<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class value number</a> <a href="#">ip-rewrite-policy reference</a>
<b>Tree</b>	<a href="#">ip-rewrite-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **profile** *keyword*

<b>Description</b>	The profile to which the traffic-class value is mapped
<b>Context</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i> <a href="#">traffic-class value number</a> <a href="#">profile keyword</a>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multifield-classifier** [name](#) *string*

<b>Description</b>	List of multifield-classifier QoS policies
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i>
<b>Tree</b>	<a href="#">multifield-classifier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	The name of multifield-classifier QoS policy
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **entry** [sequence-id](#) *number*

<b>Description</b>	List of individual QoS multifield-classifier entries
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-id** *number*

<b>Description</b>	A number to indicate the relative evaluation order of the different terms; lower numbered terms are evaluated before higher numbered terms
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i>
<b>Range</b>	0 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**action**

<b>Description</b>	Container for the actions to be applied to packets matching the classifier entry.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action</a>
<b>Tree</b>	<a href="#">action</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**drop-probability** *keyword*

<b>Description</b>	Assign matching packets to the specified drop probability level The implicit default, if not specified, is low drop-probability.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**forwarding-class** *reference*

<b>Description</b>	The forwarding class to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>

<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## profile *keyword*

<b>Description</b>	The profile to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos classifiers multifeild-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## rewrite

<b>Description</b>	Rewrite actions associated with packets that match the classifier entry. Where a packet matches these criteria, the specified rewrite actions should be performed.
<b>Context</b>	<a href="#">qos classifiers multifeild-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action rewrite</a>
<b>Tree</b>	<a href="#">rewrite</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7250

**set-dscp number**

<b>Description</b>	Sets the 6-bit DSCP (differentiated services code point) value in the IP packet header.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">action rewrite set-dscp</a> <i>number</i>
<b>Tree</b>	<a href="#">set-dscp</a>
<b>Range</b>	0 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7250

**match**

<b>Description</b>	Matching conditions for QoS multifield-classifier
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match</a>
<b>Tree</b>	<a href="#">match</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4**

<b>Description</b>	Container for the layer-3 IPv4 match criteria
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-ip**

<b>Description</b>	Packet matching criteria based on destination IPv4 address
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<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip</a>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of the mask equals this IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mask string**

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip mask string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv4 prefix.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip prefix string</a>

<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-list name reference**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv4 prefix list.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip prefix-list name reference</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **name reference**

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 destination-ip prefix-list name reference</a>
<b>Reference</b>	<a href="#">acl match-list ipv4-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp-set (number | keyword)**

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 dscp-set (number   keyword)</a>

<b>Tree</b>	dscp-set
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### first-fragment *boolean*

<b>Description</b>	<p>Match the first fragment of an IPv4 datagram</p> <p>A packet matches the true condition if the IPv4 header indicates that the fragment-offset is zero and the more-fragments bit is 1. It is not valid to configure this leaf without configuring a match value for the fragment leaf.</p>
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<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 first-fragment boolean</a>
<b>Tree</b>	<a href="#">first-fragment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### fragment *boolean*

<b>Description</b>	Match an IPv4 fragment  A packet matches the true condition if the IPv4 header indicates that the fragment-offset is zero and the more-fragments bit is 1 or if the IPv4 header indicates that the fragment-offset is greater than 0. A packet matches the false condition if it is unfragmented.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 fragment boolean</a>
<b>Tree</b>	<a href="#">fragment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### icmp

<b>Description</b>	A packet matches this condition if its ICMP type and code matches one of the specified combinations  The rule should also have a condition that the IP protocol equals 1 (ICMP) in order for this to be interpreted correctly.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 icmp</a>
<b>Tree</b>	<a href="#">icmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**code number**

<b>Description</b>	Match if the ICMP code value is any value in the list Requires ICMP type to be specified because codes are type dependent.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 icmp code number</a>
<b>Tree</b>	<a href="#">code</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type (number | keyword)**

<b>Description</b>	Match a single ICMP type value.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 icmp type (number   keyword)</a>
<b>Tree</b>	<a href="#">type</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• echo-reply ICMP Echo Reply</li> <li>• dest-unreachable ICMP Destination Unreachable</li> <li>• source-quench ICMP Source Quench</li> <li>• redirect ICMP Redirect</li> <li>• echo ICMP Echo</li> <li>• router-advertise ICMP Router Advertisement</li> <li>• router-solicit ICMP Router Solicitation</li> <li>• time-exceeded ICMP Time Exceeded</li> <li>• param-problem</li> </ul>

	ICMP Parameter Problem
	• timestamp
	ICMP Timestamp
	• timestamp-reply
	ICMP Timestamp Reply
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol** (*number* | *keyword*)

<b>Description</b>	An IPv4 packet matches this condition if its IP protocol type field matches the specified value
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id number</a> <a href="#">match ipv4 protocol</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">protocol</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv6-hop</a> IPv6 hop-by-hop option</li> <li>• <a href="#">icmp</a> Internet Control Message Protocol</li> <li>• <a href="#">igmp</a> Internet Group Management Protocol</li> <li>• <a href="#">ggp</a> Gateway-to-Gateway Protocol</li> <li>• <a href="#">ipv4</a> IPv4 encapsulation</li> <li>• <a href="#">st</a> Stream Protocol</li> <li>• <a href="#">tcp</a> Transmission Control Protocol</li> <li>• <a href="#">egp</a> Exterior Gateway Protocol</li> <li>• <a href="#">igp</a> Interior Gateway Protocol</li> </ul>

- udp  
User Datagram Protocol
- ipv6  
IPv6 encapsulation
- idrp  
Inter-Domain Routing Protocol
- rsvp  
Resource Reservation Protocol
- gre  
Generic Routing Encapsulation
- esp  
IPSec Encapsulating Security Payload
- ah  
IPSec Authentication Header
- icmp6  
IPSec Authentication Header
- no-next-hdr  
No Next Header for IPv6
- ipv6-dest-opts  
Destination Options for IPv6
- eigrp  
Cisco EIGRP
- ospf  
OSPFv2 and OSPFv3
- pim  
Protocol Independent Multicast
- vrrp  
Virtual Router Redundancy Protocol
- l2tp  
Layer Two Tunneling Protocol
- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-ip

<b>Description</b>	Packet matching criteria based on source IPv4 address
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip</a>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

<b>Description</b>	Match a packet if its source IP address logically anded with the inverse of the mask equals this IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip address string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mask string

<b>Description</b>	Match a packet if its source IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip mask string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True

<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
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### prefix string

<b>Description</b>	Match a packet if its source IP address is within the specified IPv4 prefix.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-list name reference

<b>Description</b>	Match a packet if its source IP address is within the specified IPv4 prefix list.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip prefix-list name reference</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### name reference

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv4 source-ip prefix-list name reference</a>
<b>Reference</b>	<a href="#">acl match-list ipv4-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Container for the layer-3 IPv6 match criteria
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## destination-ip

<b>Description</b>	Packet matching criteria based on destination IPv6 address
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv6 destination-ip</a>
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of the mask equals this IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv6 destination-ip address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mask string**

<b>Description</b>	Match a packet if its destination IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 destination-ip mask string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv6 prefix.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 destination-ip prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-list name reference**

<b>Description</b>	Match a packet if its destination IP address is within the specified IPv6 prefix list.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 destination-ip prefix-list name reference</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1



**name reference**

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv6 destination-ip prefix-list name</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl match-list ipv6-prefix-list name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp-set** (*number* | *keyword*)

<b>Description</b>	A list of DSCP values to be matched for incoming packets. An OR match should be performed, such that a packet must match one of the values defined in this list. If the field is left empty then any DSCP value matches.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match ipv6 dscp-set</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">dscp-set</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> </ul>

- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**icmp6****Description**

A packet matches this condition if its ICMPv6 type and code matches one of the specified combinations

The rule should also have a condition that the next-header value equals 58 (ICMPv6) in order for this to be interpreted correctly.

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match ipv6 icmp6](#)

**Tree**

[icmp6](#)

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**code number****Description**

Match if the ICMPv6 code value is any value in the list

Requires ICMPv6 type to be specified because codes are type dependent.

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match ipv6 icmp6 code number](#)

**Tree**

[code](#)

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** (*number* | *keyword*)

<b>Description</b>	Match a single ICMPv6 type value
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id</a> <a href="#">number match ipv6 icmp6 type</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">type</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"><li>• <code>dest-unreachable</code> ICMPv6 Destination Unreachable</li><li>• <code>packet-too-big</code> ICMPv6 Packet Too Big</li><li>• <code>time-exceeded</code> ICMPv6 Time Exceeded</li><li>• <code>param-problem</code> Parameter Problem</li><li>• <code>echo-request</code> ICMPv6 Echo Request</li><li>• <code>echo-reply</code> ICMPv6 Echo Reply</li><li>• <code>mld-query</code> Multicast Listener Discovery Query</li><li>• <code>mld-report</code> Multicast Listener Discovery Report</li><li>• <code>mld-done</code> Multicast Listener Discovery Done</li><li>• <code>router-solicit</code> ICMPv6 Router Solicitation</li><li>• <code>router-advertise</code> ICMPv6 Router Advertisement</li><li>• <code>neighbor-solicit</code> ICMPv6 Neighbor Solicitation</li><li>• <code>neighbor-advertise</code> ICMPv6 Neighbor Advertisement</li><li>• <code>redirect</code> ICMPv6 Redirect</li><li>• <code>router-renumber</code></li></ul>

	<ul style="list-style-type: none"> <li>ICMPv6 Router Renumbering</li> <li>node-info-query ICMPv6 Node Information Query</li> <li>node-info-response ICMPv6 Node Information Response</li> <li>mld-v2 Multicast Listener Discovery Version 2</li> <li>mcast-rtr-adv Multicast Router Advertisement</li> <li>mcast-rtr-solicit Multicast Router Solicitation</li> <li>mcast-rtr-term Multicast Router Termination</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **next-header** (*number* | *keyword*)

<b>Description</b>	An IPv6 packet matches this condition if its first next-header field (in the IPv6 fixed header) contains the specified value
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 next-header</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">next-header</a>
<b>Range</b>	0 to 255
<b>Options</b>	<ul style="list-style-type: none"> <li>ipv6-hop IPv6 hop-by-hop option</li> <li>icmp Internet Control Message Protocol</li> <li>igmp Internet Group Management Protocol</li> <li>ggp Gateway-to-Gateway Protocol</li> <li>ipv4 IPv4 encapsulation</li> </ul>

- st  
Stream Protocol
- tcp  
Transmission Control Protocol
- egp  
Exterior Gateway Protocol
- igp  
Interior Gateway Protocol
- udp  
User Datagram Protocol
- ipv6  
IPv6 encapsulation
- idrp  
Inter-Domain Routing Protocol
- rsvp  
Resource Reservation Protocol
- gre  
Generic Routing Encapsulation
- esp  
IPSec Encapsulating Security Payload
- ah  
IPSec Authentication Header
- icmp6  
IPSec Authentication Header
- no-next-hdr  
No Next Header for IPv6
- ipv6-dest-opts  
Destination Options for IPv6
- eigrp  
Cisco EIGRP
- ospf  
OSPFv2 and OSPFv3
- pim  
Protocol Independent Multicast
- vrrp  
Virtual Router Redundancy Protocol

- l2tp  
Layer Two Tunneling Protocol
- sctp  
Stream Control Transmission Protocol
- mpls-in-ip  
MPLS Encapsulation inside IP
- rohc  
Robust Header Compression

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-ip****Description**

Packet matching criteria based on source IPv6 address

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip](#)

**Tree**[source-ip](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string****Description**

Match a packet if its source IP address logically anded with the inverse of the mask equals this IP address.

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip address string](#)

**Tree**[address](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mask string**

<b>Description</b>	Match a packet if its source IP address logically anded with the inverse of this mask equals the configured IP address.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip mask string</a>
<b>Tree</b>	<a href="#">mask</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix string**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv6 prefix.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-list name reference**

<b>Description</b>	Match a packet if its source IP address is within the specified IPv6 prefix list.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip prefix-list name reference</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**name** *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match ipv6 source-ip prefix-list name reference</a>
<b>Reference</b>	<a href="#">acl match-list ipv6-prefix-list name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transport**

<b>Description</b>	Container for the layer-4 transport match criteria
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match transport</a>
<b>Tree</b>	<a href="#">transport</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-port**

<b>Description</b>	A packet matches this condition if its destination TCP or UDP port number matches the value or range that is specified  The rule should also have a condition that the IP protocol equals 6 (TCP) or 17 (UDP) in order for this to be interpreted correctly.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match transport destination-port</a>
<b>Tree</b>	<a href="#">destination-port</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**operator** *keyword*

<b>Description</b>	Comparison operator eq = equal ge = greater than or equal to le = less than or equal to
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id number</a> <a href="#">match transport destination-port operator keyword</a>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>le Less than or equal.</li> <li>ge Greater than or equal.</li> <li>eq Equal to.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**range**

<b>Description</b>	Container used to specify a contiguous range of TCP/UDP port numbers
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id number</a> <a href="#">match transport destination-port range</a>
<b>Tree</b>	<a href="#">range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end** (*number* | *keyword*)

<b>Description</b>	The ending port number to include in the range
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id number</a> <a href="#">match transport destination-port range end</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">end</a>
<b>Range</b>	0 to 65535

**Options**

- acap  
Application Configuration Access Protocol
- afp-tcp  
Apple Filing Protocol over TCP
- arns  
A Remote Network Server System
- asf-rmcp  
ASF Remote Management and Control Protocol & IPMI Remote Management Protocol
- ashare  
AppleShare IP Web Administration
- atalk-rm  
AppleTalk Routing Maintenance
- aurp  
AppleTalk Update-Based Routing Protocol
- auth  
Authentication Service
- bfd  
Bidirectional Forwarding Detection Single Hop
- bfd-echo  
BFD Echo
- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp

- Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger

- Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl

- IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell

- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
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Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server

- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)

- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol



- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmplib  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)

- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver

- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start** (*number* | *keyword*)**Description**

The starting port number to include in the range

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match transport destination-port range start](#) (*number* | *keyword*)

**Tree**[start](#)**Range**

0 to 65535

**Options**

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Apple Filing Protocol over TCP
- arns  
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NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
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- netbios-ns  
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new-rwho, new-who
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Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
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- rje  
Remote Job Entry
- rlp  
Resource Location Protocol

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tcpnethasprv, Aladdin Knowledge Systems Hasp services
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- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950

## ANSI Z39.50

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** (*number* | *keyword*)

<b>Description</b>	A destination port number
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">match transport destination-port</a> <i>value</i> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>acap</code> Application Configuration Access Protocol</li> <li>• <code>afp-tcp</code> Apple Filing Protocol over TCP</li> <li>• <code>arns</code> A Remote Network Server System</li> <li>• <code>asf-rmcp</code> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <code>ashare</code> AppleShare IP Web Administration</li> <li>• <code>atalk-rm</code> AppleTalk Routing Maintenance</li> <li>• <code>aurp</code> AppleTalk Update-Based Routing Protocol</li> <li>• <code>auth</code> Authentication Service</li> <li>• <code>bfd</code> Bidirectional Forwarding Detection Single Hop</li> <li>• <code>bfd-echo</code> BFD Echo</li> <li>• <code>bftp</code> Background File Transfer Program</li> </ul>

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- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
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NIC hostname server

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HP data alarm manager
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- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
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Kerberos login
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BFD session over each LAG member link

- microsoft-ds  
Microsoft Directory Services
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Monitor
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Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
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- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
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NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service

- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
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PIM Auto-RP
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PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages

- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)

- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol

- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-port****Description**

A packet matches this condition if its source TCP or UDP port number matches the value or range that is specified

The rule should also have a condition that the IP protocol equals 6 (TCP) or 17 (UDP) in order for this to be interpreted correctly.

**Context**

[qos classifiers multifield-classifier name string entry sequence-id number match transport source-port](#)

<b>Tree</b>	<a href="#">source-port</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## operator *keyword*

<b>Description</b>	Comparison operator eq = equal ge = greater than or equal to le = less than or equal to
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match transport source-port operator keyword</a>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>le Less than or equal.</li> <li>ge Greater than or equal.</li> <li>eq Equal to.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## range

<b>Description</b>	Container used to specify a contiguous range of TCP/UDP port numbers
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match transport source-port range</a>
<b>Tree</b>	<a href="#">range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end** (*number* | *keyword*)

<b>Description</b>	The ending port number to include in the range
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <a href="#">string entry sequence-id</a> <a href="#">number match transport source-port range end</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">end</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">acap</a> Application Configuration Access Protocol</li> <li>• <a href="#">afp-tcp</a> Apple Filing Protocol over TCP</li> <li>• <a href="#">arns</a> A Remote Network Server System</li> <li>• <a href="#">asf-rmcp</a> ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>• <a href="#">ashare</a> AppleShare IP Web Administration</li> <li>• <a href="#">atalk-rm</a> AppleTalk Routing Maintenance</li> <li>• <a href="#">aurp</a> AppleTalk Update-Based Routing Protocol</li> <li>• <a href="#">auth</a> Authentication Service</li> <li>• <a href="#">bfd</a> Bidirectional Forwarding Detection Single Hop</li> <li>• <a href="#">bfd-echo</a> BFD Echo</li> <li>• <a href="#">bftp</a> Background File Transfer Program</li> <li>• <a href="#">bgmp</a> Border Gateway Multicast Protocol</li> <li>• <a href="#">bgp</a> Border Gateway Protocol</li> <li>• <a href="#">bootpc</a> Bootstrap Protocol (BOOTP) Client and DHCP Client</li> </ul>



- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications
- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol

- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u  
GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)

- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration

- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol (L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration
- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor

- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts

- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol

- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)

- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services



- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start** (*number* | *keyword*)**Description**

The starting port number to include in the range

**Context**

[qos classifiers](#) [multifield-classifier name](#) [string entry](#) [sequence-id](#) [number match](#) [transport source-port range](#) [start](#) (*number* | *keyword*)

**Tree**[start](#)**Range**

0 to 65535

**Options**

- acap  
Application Configuration Access Protocol
- afp-tcp  
Apple Filing Protocol over TCP
- arns  
A Remote Network Server System

- asf-rmcp  
ASF Remote Management and Control Protocol & IPMI Remote Management Protocol
- ashare  
AppleShare IP Web Administration
- atalk-rm  
AppleTalk Routing Maintenance
- aurp  
AppleTalk Update-Based Routing Protocol
- auth  
Authentication Service
- bfd  
Bidirectional Forwarding Detection Single Hop
- bfd-echo  
BFD Echo
- bftp  
Background File Transfer Program
- bgmp  
Border Gateway Multicast Protocol
- bgp  
Border Gateway Protocol
- bootpc  
Bootstrap Protocol (BOOTP) Client and DHCP Client
- bootps  
Bootstrap Protocol (BOOTP) Server and DHCP Server
- ccso-ns  
CCSO Nameserver
- chargen  
Character Generator Protocol (CHARGEN)
- cisco-tdp  
Cisco Tag Distribution Protocol
- citadel  
Citadel
- clearcase  
ClearCase albd
- commerce  
Commerce Applications

- courier  
Remote Procedure Call
- daytime  
Daytime Protocol
- dhcpv6-client  
DHCPv6 Client
- dhcpv6-server  
DHCPv6 Server
- dhcp-failover  
DHCP Failover Protocol
- dicom  
Digital Imaging and Communications in Medicine
- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control

- `ftps-data`  
FTPS (FTP over SSL/TLS) data
- `godi`  
Group Domain Of Interpretation (GDOI) protocol
- `gopher`  
Gopher protocol
- `gtp-c`  
GTP control messages (GTP-C)
- `gtp-prime`  
GTP prime CDR logging protocol
- `gtp-u`  
GTP user data messages (GTP-U)
- `ha-cluster`  
Linux-HA high-availability heartbeat
- `hostname`  
NIC hostname server
- `hp-alarm-mgr`  
HP data alarm manager
- `http`  
Hypertext Transfer Protocol
- `http-alt`  
FileMaker Web Sharing (HTTP Alternate)
- `http-mgmt`  
`http-mgmt`
- `http-rpc`  
Remote procedure call over Hypertext Transfer Protocol
- `https`  
Hypertext Transfer Protocol over TLS/SSL
- `ieee-mms-ssl`  
IEEE Media Management System over SSL
- `imap`  
Internet Message Access Protocol (IMAP)
- `imap3`  
Internet Message Access Protocol (IMAP), version 3
- `imaps`  
Internet Message Access Protocol over TLS/SSL

- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp  
Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol  
(L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp

- Label Distribution Protocol
- Imp
- Link Management Protocol (LMP)
- login
- rlogin (TCP) or Who (UDP)
- lpd
- Line Printer Daemon
- lsp-ping
- MPLS LSP-echo
- mac-server-adm
- Mac OS X Server administration
- matip-a
- Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b
- Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd
- BFD session over each LAG member link
- microsoft-ds
- Microsoft Directory Services
- mobile-ip
- Mobile IP Agent
- monitor
- Monitor
- mpp
- Message posting protocol (MPP)
- mssql-m
- Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s
- Microsoft SQL Server database management system (MSSQL) server
- msdp
- Multicast Source Discovery Protocol
- ms-exchange
- MS Exchange Routing
- msp
- Message Send Protocol
- multihop-bfd

## Bidirectional Forwarding Detection Multi-Hop

- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol
- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr

- Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)
- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip



- Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor
- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmp  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs

- Structured Query Language (SQL) Services
  - sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)
- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)

	<ul style="list-style-type: none"> <li>xns-mail Xerox Network Systems (XNS) Mail</li> <li>xns-time Xerox Network Systems (XNS) Time Protocol</li> <li>z3950 ANSI Z39.50</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### value (*number* | *keyword*)

<b>Description</b>	A source port number
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string entry sequence-id number match transport source-port value</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 65535
<b>Options</b>	<ul style="list-style-type: none"> <li>acap Application Configuration Access Protocol</li> <li>afp-tcp Apple Filing Protocol over TCP</li> <li>arns A Remote Network Server System</li> <li>asf-rmcp ASF Remote Management and Control Protocol &amp; IPMI Remote Management Protocol</li> <li>ashare AppleShare IP Web Administration</li> <li>atalk-rm AppleTalk Routing Maintenance</li> <li>aurp AppleTalk Update-Based Routing Protocol</li> <li>auth Authentication Service</li> <li>bfd</li> </ul>

- 
- Bidirectional Forwarding Detection Single Hop
  - bfd-echo  
  BFD Echo
  - bftp  
  Background File Transfer Program
  - bgmp  
  Border Gateway Multicast Protocol
  - bgp  
  Border Gateway Protocol
  - bootpc  
  Bootstrap Protocol (BOOTP) Client and DHCP Client
  - bootps  
  Bootstrap Protocol (BOOTP) Server and DHCP Server
  - ccso-ns  
  CCSO Nameserver
  - chargen  
  Character Generator Protocol (CHARGEN)
  - cisco-tdp  
  Cisco Tag Distribution Protocol
  - citadel  
  Citadel
  - clearcase  
  ClearCase albd
  - commerce  
  Commerce Applications
  - courier  
  Remote Procedure Call
  - daytime  
  Daytime Protocol
  - dhcpv6-client  
  DHCPv6 Client
  - dhcpv6-server  
  DHCPv6 Server
  - dhcp-failover  
  DHCP Failover Protocol
  - dicom

## Digital Imaging and Communications in Medicine

- discard  
Discard Protocol. Also Wake-on-LAN.
- dnsix  
DNSIX security protocol auditing
- domain  
Domain Name System
- dsp  
Display Support Protocol
- echo  
Echo Protocol
- epp  
Extensible Provisioning Protocol
- esro  
Efficient Short Remote Operations (ESRO)
- exec  
Remote Process Execution (Rexec)
- finger  
Finger protocol
- ftp  
File Transfer Protocol control
- ftp-data  
File Transfer Protocol data
- ftps  
FTPS (FTP over SSL/TLS) control
- ftps-data  
FTPS (FTP over SSL/TLS) data
- godi  
Group Domain Of Interpretation (GDOI) protocol
- gopher  
Gopher protocol
- gtp-c  
GTP control messages (GTP-C)
- gtp-prime  
GTP prime CDR logging protocol
- gtp-u

- GTP user data messages (GTP-U)
- ha-cluster  
Linux-HA high-availability heartbeat
- hostname  
NIC hostname server
- hp-alarm-mgr  
HP data alarm manager
- http  
Hypertext Transfer Protocol
- http-alt  
FileMaker Web Sharing (HTTP Alternate)
- http-mgmt  
http-mgmt
- http-rpc  
Remote procedure call over Hypertext Transfer Protocol
- https  
Hypertext Transfer Protocol over TLS/SSL
- ieee-mms-ssl  
IEEE Media Management System over SSL
- imap  
Internet Message Access Protocol (IMAP)
- imap3  
Internet Message Access Protocol (IMAP), version 3
- imaps  
Internet Message Access Protocol over TLS/SSL
- ipp  
Internet Printing Protocol
- ipsec  
Internet Protocol Security (IPSec)
- ipx  
Internetwork Packet Exchange (IPX)
- irc  
Internet Relay Chat (IRC)
- iris-beep  
IRIS (Internet Registry Information Service) over BEEP
- isakmp

- Internet Security Association and Key Management Protocol (ISAKMP) /  
Internet Key Exchange (IKE)
- isakmp-nat  
IPSec NAT Traversal
- iscsi  
iSCSI
- iso-tsap  
ISO Transport Service Access Point (TSAP) Class 0 protocol
- kerberos  
Kerberos authentication system
- kerberos-adm  
Kerberos administration
- klogin  
Kerberos login
- kpasswd  
Kerberos Change/Set password
- kshell  
Kerberos Remote shell
- l2tp  
Layer 2 Forwarding Protocol (L2F) and Layer 2 Tunneling Protocol  
(L2TP)
- ldap  
Lightweight Directory Access Protocol (LDAP)
- ldaps  
Lightweight Directory Access Protocol over TLS/SSL (LDAPS)
- ldp  
Label Distribution Protocol
- lmp  
Link Management Protocol (LMP)
- login  
rlogin (TCP) or Who (UDP)
- lpd  
Line Printer Daemon
- lsp-ping  
MPLS LSP-echo
- mac-server-adm  
Mac OS X Server administration

- matip-a  
Mapping of Airline Traffic over Internet Protocol (MATIP) type A
- matip-b  
Mapping of Airline Traffic over Internet Protocol (MATIP) type B
- micro-bfd  
BFD session over each LAG member link
- microsoft-ds  
Microsoft Directory Services
- mobile-ip  
Mobile IP Agent
- monitor  
Monitor
- mpp  
Message posting protocol (MPP)
- mssql-m  
Microsoft SQL Server database management system (MSSQL) monitor
- mssql-s  
Microsoft SQL Server database management system (MSSQL) server
- msdp  
Multicast Source Discovery Protocol
- ms-exchange  
MS Exchange Routing
- msp  
Message Send Protocol
- multihop-bfd  
Bidirectional Forwarding Detection Multi-Hop
- nas  
Netnews Administration System (NAS)
- ncp  
NetWare Core Protocol
- netrjs-1  
NETRJS protocol
- netrjs-2  
NETRJS protocol
- netrjs-3  
NETRJS protocol



- netrjs-4  
NETRJS protocol
- netbios-data  
NetBIOS Datagram Service
- netbios-ns  
NetBIOS Name Service
- netbios-ss  
NetBIOS Session Service
- netnews  
Netnews
- netwall  
netwall, for Emergency Broadcasts
- new-rwho  
new-rwho, new-who
- nfs  
Network File System (NFS)
- nntp  
Network News Transfer Protocol (NNTP)
- nntps  
Network News Transfer Protocol over TLS/SSL (NNTPS)
- ntp  
Network Time Protocol (NTP)
- odmr  
On-Demand Mail Relay (ODMR)
- olsr  
Optimized Link State Routing (OLSR)
- openvpn  
OpenVPN
- pim-auto-rp  
PIM Auto-RP
- pkix-timestamp  
PKIX Time Stamp Protocol (TSP)
- pop2  
Post Office Protocol, version 2 (POP2)
- pop3  
Post Office Protocol, version 3 (POP3)

- pop3s  
Post Office Protocol 3 over TLS/SSL (POP3S)
- pptp  
Point-to-Point Tunneling Protocol (PPTP)
- ptp-event  
Precision Time Protocol (PTP) event messages
- ptp-general  
Precision Time Protocol (PTP) general messages
- print-srv  
Network PostScript print server
- qmtp  
Quick Mail Transfer Protocol
- qotd  
Quote of the Day (QOTD)
- radius  
RADIUS authentication protocol
- radius-acct  
RADIUS accounting protocol
- remote-mail  
Remote Mail Checking Protocol
- remotefs  
Remotefs, RFS Server
- remotecmd  
SupportSoft Nexus Remote Command
- rip  
Routing Information Protocol
- rje  
Remote Job Entry
- rlp  
Resource Location Protocol
- rlzdb  
RLZ DBase
- rmc  
IBM RMC (Remote monitoring and Control) protocol
- rmonitor  
rmonitor, Remote Monitor

- rpc2portmap  
Rpc2portmap
- rsync  
rsync file synchronization protocol
- rtelnet  
Remote User Telnet Service (RTelnet)
- rtsp  
Real Time Streaming Protocol (RTSP)
- sgmplib  
Simple Gateway Monitoring Protocol (SGMP)
- silc  
Secure Internet Live Conferencing (SILC)
- smux  
SNMP multiplexing protocol (SMUX)
- sna-gw  
IBM Systems Network Architecture (SNA) gateway access server
- snmp  
Simple Network Management Protocol (SNMP)
- snmp-trap  
SNMP Traps
- snpp  
Simple Network Paging Protocol (SNPP)
- smtp  
Simple Mail Transfer Protocol (SMTP)
- sql-svcs  
Structured Query Language (SQL) Services
- sql  
Structured Query Language (SQL) Service
- ssh  
Secure Shell Protocol
- submission  
Email message submission (SMTP)
- sunrpc  
Open Network Computing Remote Procedure Call (ONC RPC), also Sun RPC
- svcloc  
Service Location Protocol (SLP)

- syslog  
Syslog (UDP) and Remote Shell (TCP)
- systat  
Active Users (systat service)
- tacacs  
TACACS Login Host protocol
- talk  
Talk
- tcpmux  
TCP Port Service Multiplexer (TCPMUX)
- tcpnethasprv  
tcpnethasprv, Aladdin Knowledge Systems Hasp services
- tftp  
Trivial File Transfer Protocol (TFTP)
- time  
Time Protocol
- timed  
Timeserver
- ups  
Uninterruptible power supply (UPS)
- xdmcp  
X Display Manager Control Protocol (XDMCP)
- xns-ch  
Xerox Network Systems (XNS) Clearinghouse (Name Server)
- xns-mail  
Xerox Network Systems (XNS) Mail
- xns-time  
Xerox Network Systems (XNS) Time Protocol
- z3950  
ANSI Z39.50

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tcp-flags** *string*

<b>Description</b>	A logical expression using the &,   and ! logical operators and the TCP flag names: rst, syn and ack.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id number</a> <a href="#">match transport tcp-flags</a> <i>string</i>
<b>Tree</b>	<a href="#">tcp-flags</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tcam-entries**

<b>Description</b>	Information about the TCAM entries used to implement the ACL entry
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id number</a> <a href="#">tcam-entries</a>
<b>Tree</b>	<a href="#">tcam-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-complex** [complex-identifier](#) *string*

<b>Description</b>	List of forwarding complexes in the system
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id number</a> <a href="#">tcam-entries forwarding-complex complex-identifier</a> <i>string</i>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**complex-identifier** *string*

<b>Description</b>	A forwarding complex in the format (slot-number,complex-number).
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<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex complex-identifier</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-total** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry on all subinterfaces of this complex where the filter is applied to ingress traffic.  For example, if a single-instance of the entry takes 2 TCAM entries and the filter is an output-only subinterface-specific filter and the filter is applied to 5 subinterfaces on output and to 5 subinterfaces on input then input-total=2. If the entry is not applied to ingress traffic on any subinterfaces of this complex then input-total=0.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex complex-identifier</a> <i>string</i> <a href="#">input-total</a> <i>number</i>
<b>Tree</b>	<a href="#">input-total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**output-total** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry on all subinterfaces of this complex where the filter is applied to egress traffic.  For example, if a single-instance of the entry takes 2 TCAM entries and the filter is an output-only subinterface-specific filter and the filter is applied to 5 subinterfaces on output and to 5 subinterfaces on input then output-total=10. If the entry is not applied to egress traffic on any subinterfaces of this complex then output-total=0.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex complex-identifier</a> <i>string</i> <a href="#">output-total</a> <i>number</i>
<b>Tree</b>	<a href="#">output-total</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**single-instance** *number*

<b>Description</b>	The number of TCAM entries required to implement this entry if it is applied to only one subinterface and one traffic direction specific to this slot.  This is non-zero even if the filter is not applied to any subinterfaces of this complex. It captures the effect of TCAM entry expansion to deal with L4 port or VLAN ranges, for example.
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">tcam-entries forwarding-complex complex-identifier</a> <i>string</i> <a href="#">single-instance number</a>
<b>Tree</b>	<a href="#">single-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Type of the QoS multifield-classifier
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>ipv4</code> Multifield-classifier using ipv4-based matching criteria</li> <li>• <code>ipv6</code> Multifield-classifier using ipv6-based matching criteria</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**vxlan-default** *reference*

<b>Description</b>	Reference to the name of a DSCP mapping policy that applies to terminating VXLAN packets
<b>Context</b>	<a href="#">qos classifiers vxlan-default</a> <i>reference</i>
<b>Tree</b>	<a href="#">vxlan-default</a>
<b>Reference</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### explicit-congestion-notification

<b>Description</b>	Enable the explicit-congestion-notification context
<b>Context</b>	<a href="#">qos explicit-congestion-notification</a>
<b>Tree</b>	<a href="#">explicit-congestion-notification</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### ecn-dscp-policy *reference*

<b>Description</b>	Reference to the DSCP rewrite policy to use when DSCP rewrite is required as a side effect of ECN remarking.  This is required configuration in order to globally enable ECN on J2 platforms
<b>Context</b>	<a href="#">qos explicit-congestion-notification ecn-dscp-policy reference</a>
<b>Tree</b>	<a href="#">ecn-dscp-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### forwarding-classes

<b>Description</b>	Enclosing container for list of user-defined forwarding class names
<b>Context</b>	<a href="#">qos forwarding-classes</a>
<b>Tree</b>	<a href="#">forwarding-classes</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**forwarding-class** *name string*

<b>Description</b>	Enter the forwarding-class list instance
<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name string</a>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	User-defined name of the forwarding class  The following forwarding-class names are the system-reserved default FC names on 7250 IXR systems: fc0 fc1 fc2 fc3 fc4 fc5 fc6 fc7  In addition to fc0-fc7, the following forwarding-class names are also system-reserved default FC names on FPcx based platforms fc8 fc9 fc10 fc11 fc12 fc13 fc14 fc15
<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class-index** *number*

<b>Description</b>	Associates the forwarding class name with an index representing the forwarding-class-index. Forwarding classes with a higher forwarding-class-index are generally (subject to scheduler configuration) serviced more preferentially than forwarding classes with a lower forwarding-class-index.  For the system-reserved default forwarding classes: fc0 -> forwarding-class-index = 0 fc1 -> forwarding-class-index = 1 fc2 -> forwarding-class-index = 2 fc3 -> forwarding-class-index = 3 fc4 -> forwarding-class-index = 4 fc5 -> forwarding-class-index = 5 fc6 -> forwarding-class-index = 6 fc7 -> forwarding-class-index = 7 fc8 -> forwarding-class-index = 8 fc9 -> forwarding-class-index = 9 fc10 -> forwarding-class-index = 10 fc11 -> forwarding-class-index = 11 fc12 -> forwarding-class-index = 12 fc13 -> forwarding-class-index = 13 fc14 -> forwarding-class-index = 14 fc15 -> forwarding-class-index = 15
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<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i> forwarding-class-index number
<b>Tree</b>	<a href="#">forwarding-class-index</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## output

<b>Description</b>	Enter the output context
<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i> output
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## multicast-queue *reference*

<b>Description</b>	Output queue for multicast packets within this forwarding class
<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i> output multicast-queue <i>reference</i>
<b>Tree</b>	<a href="#">multicast-queue</a>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## queue *reference*

<b>Description</b>	Output queue for this forwarding class
<b>Context</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i> output queue <i>reference</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### slope-policy *reference*

**Description** Assigns slope policy to interface-level forwarding-class

**Context** [qos forwarding-classes forwarding-class name string output slope-policy reference](#)

**Tree** [slope-policy](#)

**Reference** [qos buffer-management slope-policy name string](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unicast-queue *reference*

**Description** Output queue for unicast packets within this forwarding class

For the system-reserved default forwarding classes: fc0 -> unicast-queue = unicast-queue0 fc1 -> unicast-queue = unicast-queue1 fc2 -> unicast-queue = unicast-queue2 fc3 -> unicast-queue = unicast-queue3 fc4 -> unicast-queue = unicast-queue4 fc5 -> unicast-queue = unicast-queue5 fc6 -> unicast-queue = unicast-queue6 fc7 -> unicast-queue = unicast-queue7

**Context** [qos forwarding-classes forwarding-class name string output unicast-queue reference](#)

**Tree** [unicast-queue](#)

**Reference** [qos queues queue name string](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### input-class-map *name string*

**Description** Enter the input-class-map list instance

**Context** [qos input-class-map name string](#)

**Tree** [input-class-map](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 32

### **name** *string*

**Description** User defined input-class-map name

**Context** [qos input-class-map name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **forwarding-class** [name](#) *reference*

**Description** Enter the forwarding-class list instance

**Context** [qos input-class-map name](#) *string* [forwarding-class name](#) *reference*

**Tree** [forwarding-class](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *reference*

**Description** The forwarding class

**Context** [qos input-class-map name](#) *string* [forwarding-class name](#) *reference*

**Reference** [qos forwarding-classes](#) [forwarding-class name](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policers**

<b>Description</b>	Container containing the assignment of the policers to respective forwarding types
<b>Context</b>	<a href="#">qos input-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">policers</a>
<b>Tree</b>	<a href="#">policers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**broadcast-policer reference**

<b>Description</b>	Policer for the broadcast traffic
<b>Context</b>	<a href="#">qos input-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">policers</a> <a href="#">broadcast-policer</a> <i>reference</i>
<b>Tree</b>	<a href="#">broadcast-policer</a>
<b>Reference</b>	<a href="#">qos policer-policies</a> <a href="#">policer-policy name</a> <i>string</i> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**multicast-policer reference**

<b>Description</b>	Policer for the multicast traffic
<b>Context</b>	<a href="#">qos input-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">policers</a> <a href="#">multicast-policer</a> <i>reference</i>
<b>Tree</b>	<a href="#">multicast-policer</a>
<b>Reference</b>	<a href="#">qos policer-policies</a> <a href="#">policer-policy name</a> <i>string</i> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**unicast-policer reference**

<b>Description</b>	Policer for the unicast traffic
<b>Context</b>	<a href="#">qos input-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">policers</a> <a href="#">unicast-policer</a> <i>reference</i>
<b>Tree</b>	<a href="#">unicast-policer</a>
<b>Reference</b>	<a href="#">qos policer-policies</a> <a href="#">policer-policy name</a> <i>string</i> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i>
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unknown-unicast-policer *reference*

**Description** Policer for the unknown-unicast traffic

**Context** [qos input-class-map name \*string\* forwarding-class name \*reference\* policers unknown-unicast-policer \*reference\*](#)

**Tree** [unknown-unicast-policer](#)

**Reference** [qos policer-policies policer-policy name \*string\* policer policer-id \*number\*](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interfaces

**Description** Interfaces and subinterfaces with QoS configuration and state

**Context** [qos interfaces](#)

**Tree** [interfaces](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface [interface-id \*string\*](#)

**Description** List of interfaces and subinterfaces referenced by QoS policies

**Context** [qos interfaces interface interface-id \*string\*](#)

**Tree** [interface](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 16383

### interface-id *string*

**Description** Identifier for the interface or subinterface

<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## input

<b>Description</b>	Top-level container for QoS configuration and state relating to ingress traffic on the subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## classifiers

<b>Description</b>	Classifiers to be applied to the subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">classifiers</a>
<b>Tree</b>	<a href="#">classifiers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## classifier [type](#) *keyword*

<b>Description</b>	A list of classifiers that should be applied to the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">classifiers</a> <a href="#">classifier</a> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">classifier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## type *keyword*

<b>Description</b>	Type of packets matched by the classifier.
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers classifier type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>ipv4</code> Classifier matches IPv4 Unicast packets.</li> <li>• <code>ipv6</code> Classifier matches IPv6 Unicast packets.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *reference*

<b>Description</b>	Reference to the classifier to be applied to ingress traffic on the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers classifier type</a> <i>keyword</i> <a href="#">name</a> <i>reference</i>
<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">qos classifiers multifeild-classifier name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## default

<b>Description</b>	Enable the default context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers default</a>
<b>Tree</b>	<a href="#">default</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250



IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### drop-probability *keyword*

<b>Description</b>	The default drop-probability for packets arriving on this subinterface that do not match any classification rule
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers default drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers default forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	The default profile for packets arriving on this subinterface that do not match any classification rule
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string input classifiers default profile keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Default</b>	out
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**dot1p-policy** *reference*

<b>Description</b>	Reference to the name of a dot1p mapping policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string input classifiers dot1p-policy reference</i>
<b>Tree</b>	<a href="#">dot1p-policy</a>
<b>Reference</b>	<a href="#">qos classifiers dot1p-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dscp-policy reference

<b>Description</b>	Reference to the name of a DSCP mapping policy that applies to both IPv4 and IPv6 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers dscp-policy reference</a>
<b>Tree</b>	<a href="#">dscp-policy</a>
<b>Reference</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ipv4-dscp-policy reference

<b>Description</b>	Reference to the name of a DSCP mapping policy that applies only to IPv4 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers ipv4-dscp-policy reference</a>
<b>Tree</b>	<a href="#">ipv4-dscp-policy</a>
<b>Reference</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### ipv6-dscp-policy reference

<b>Description</b>	Reference to the name of a DSCP mapping policy that applies only to IPv6 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers ipv6-dscp-policy reference</a>
<b>Tree</b>	<a href="#">ipv6-dscp-policy</a>
<b>Reference</b>	<a href="#">qos classifiers dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**ler-use-dscp** *boolean*

<b>Description</b>	Enables short-pipe model for all lsp-bindings terminated on the subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers ler-use-dscp</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ler-use-dscp</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**match-qinq-dot1p** *keyword*

<b>Description</b>	Defines which dot1p bits will be used for dot1p-classification in case of QinQ encapsulation
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers match-qinq-dot1p</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-qinq-dot1p</a>
<b>Default</b>	outer
<b>Options</b>	<ul style="list-style-type: none"> <li>• inner</li> <li>• outer</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-traffic-class-policy** *reference*

<b>Description</b>	Reference to the name of an MPLS traffic-class mapping policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers mpls-traffic-class-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">mpls-traffic-class-policy</a>
<b>Reference</b>	<a href="#">qos classifiers mpls-traffic-class-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tos-rewrite-state** *keyword*

<b>Description</b>	Defines whether given subinterface is considered as trusted/untrusted for ToS rewrite purpose
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input classifiers tos-rewrite-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">tos-rewrite-state</a>
<b>Default</b>	trusted
<b>Options</b>	<ul style="list-style-type: none"> <li>• trusted</li> <li>• untrusted</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-class-map** *reference*

<b>Description</b>	Reference to the name of input-class-map that applies to subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input input-class-map</a> <i>reference</i>
<b>Tree</b>	<a href="#">input-class-map</a>
<b>Reference</b>	<a href="#">qos input-class-map name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pfc-buffer-allocation-profile** *reference*

<b>Description</b>	Buffer-allocation-profile for pfc queues
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input pfc-buffer-allocation-profile</a> <i>reference</i>
<b>Tree</b>	<a href="#">pfc-buffer-allocation-profile</a>
<b>Reference</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**policer-policies**

<b>Description</b>	Enable the policer-policies context
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a>
<b>Tree</b>	<a href="#">policer-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-policer

<b>Description</b>	Parent-policer operational parameters
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">parent-policer</a>
<b>Tree</b>	<a href="#">parent-policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### burst-allowance *number*

<b>Description</b>	Operational value of the burst-allowance for the parent-policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">parent-policer</a> <a href="#">burst-allowance</a> <i>number</i>
<b>Tree</b>	<a href="#">burst-allowance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### rate-kbps *number*

<b>Description</b>	Operational rate of the parent policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">parent-policer</a> <a href="#">rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">rate-kbps</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### threshold-separation *number*

<b>Description</b>	Operational value of the threshold-separation for the parent-policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">parent-policer</a> <a href="#">threshold-separation</a> <i>number</i>
<b>Tree</b>	<a href="#">threshold-separation</a>

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policer** [policer-id](#) *reference*

<b>Description</b>	Enter the policer list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policer-id** *reference*

<b>Description</b>	Enter the policer-id context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cir-policer-threshold-separation-policy** *string*

<b>Description</b>	The name of cir-policer-threshold-separation policy assigned to the policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">cir-policer-threshold-separation-policy</a> <i>string</i>
<b>Tree</b>	<a href="#">cir-policer-threshold-separation-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **committed-burst-size** *number*

<b>Description</b>	The actual/operational maximum CIR bucket depth in bytes as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">committed-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-burst-size</a>

<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **committed-rate-kbps** *number*

<b>Description</b>	The actual/operational committed information rate (CIR) of the policer as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>committed-rate-kbps</b> <i>number</i>
<b>Tree</b>	<a href="#">committed-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **eir-policer-threshold-separation-policy** *string*

<b>Description</b>	The name of eir-policer-threshold-separation policy assigned to the policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>eir-policer-threshold-separation-policy</b> <i>string</i>
<b>Tree</b>	<a href="#">eir-policer-threshold-separation-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **excess-burst-size** *number*

<b>Description</b>	The actual/operational maximum EIR bucket depth in bytes as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>excess-burst-size</b> <i>number</i>
<b>Tree</b>	<a href="#">excess-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**excess-rate-kbps** *number*

<b>Description</b>	The actual/operational excess information rate (EIR) of the policer as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>excess-rate-kbps</b> <i>number</i>
<b>Tree</b>	<a href="#">excess-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class** *name reference*

<b>Description</b>	Enter the forwarding-class list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>forwarding-class</b> <i>name reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>forwarding-class</b> <i>name reference</i>
<b>Reference</b>	qos forwarding-classes forwarding-class name
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-type** *keyword*

<b>Description</b>	The list of forwarding types, belonging to this forwarding-class, to match to the policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <b>forwarding-class</b> <i>name reference</i> <b>forwarding-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unicast</li> </ul>

A packet is 'unicast' if the destination address is unicast and it matches an entry in the FIB

- unknown-unicast

A packet is 'unknown-unicast' if the destination address is unicast but it doesn't match any entry in the FIB and is therefore conventionally flooded

- multicast

A packet is 'multicast' if the destination address is a multicast address

On TD3 systems this includes multicast packets with a known destination/group address and multicast packets with an unknown destination/group address. On TD4 systems this only includes known multicast packets

- unknown-multicast

Multicast packets with an unknown destination/group address

- broadcast

A packet is 'broadcast' if the destination address is a broadcast address

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-burst-size *number*

<b>Description</b>	The actual/operational maximum PIR bucket depth in bytes as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">maximum-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### operational-separation-thresholds [input-profile](#) *keyword*

<b>Description</b>	Enter the operational-separation-thresholds list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">operational-separation-thresholds</a> <a href="#">input-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operational-separation-thresholds</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-profile** *keyword*

<b>Description</b>	The profile the input packet was classified to, based on applicable classification criteria
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">operational-separation-thresholds input-profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">out</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">exceed</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">in-plus</a> Defines packet profile as an input for colour-aware policing at ingress</li> <li>• <a href="#">in-low</a> Defines packet profile as an input for colour-blind policing at ingress</li> <li>• <a href="#">out-low</a> Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**cir-operational-separation-threshold** *number*

<b>Description</b>	The operational-threshold level for the policer cir bucket
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">operational-separation-thresholds input-profile</a> <i>keyword</i> <a href="#">cir-operational-separation-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">cir-operational-separation-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**eir-operational-separation-threshold** *number*

<b>Description</b>	The operational-threshold level for the policer eir bucket
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">operational-separation-thresholds input-profile</a> <i>keyword</i> <a href="#">eir-operational-separation-threshold</a> <i>number</i>

<b>Tree</b>	<a href="#">eir-operational-separation-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pir-operational-separation-threshold** *number*

<b>Description</b>	The operational-threshold level for the policer pir bucket
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">operational-separation-thresholds input-profile</a> <i>keyword</i> <a href="#">pir-operational-separation-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">pir-operational-separation-threshold</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peak-rate-kbps** *number*

<b>Description</b>	The actual/operational peak information rate (PIR) of the policer as it is programmed into hardware
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pir-policer-threshold-separation-policy** *string*

<b>Description</b>	The name of pir-policer-threshold-separation policy assigned to the policer
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">pir-policer-threshold-separation-policy</a> <i>string</i>
<b>Tree</b>	<a href="#">pir-policer-threshold-separation-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policer-statistics**

<b>Description</b>	The statistics per subinterface policers
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics</a>
<b>Tree</b>	<a href="#">policer-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### aggregate-statistics

<b>Description</b>	The aggregate statistics per subinterface policers
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics aggregate-statistics</a>
<b>Tree</b>	<a href="#">aggregate-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### accepted-in-octets *number*

<b>Description</b>	The number of octets in packets that were considered as Green by the policer and their input profile was 'in'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics aggregate-statistics accepted-in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### accepted-in-packets *number*

<b>Description</b>	The number of packets that were considered as Green by the policer and their input profile was 'in'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics aggregate-statistics accepted-in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-in-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-inplus-octets** *number*

<b>Description</b>	The number of octets in packets that were considered as Green by the policer and their input profile was 'inplus'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics aggregate-statistics accepted-inplus-octets number</a>
<b>Tree</b>	<a href="#">accepted-inplus-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-inplus-packets** *number*

<b>Description</b>	The number of packets that were considered as Green by the policer and their input profile was 'inplus'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics aggregate-statistics accepted-inplus-packets number</a>
<b>Tree</b>	<a href="#">accepted-inplus-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-out-octets** *number*

<b>Description</b>	The number of octets in packets that were considered Yellow having input profile 'inplus' or 'in', and packets that were considered Green and Yellow having input profile 'out'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics aggregate-statistics accepted-out-octets number</a>

<b>Tree</b>	<a href="#">accepted-out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-out-packets** *number*

<b>Description</b>	The number of packets that were considered Yellow having input profile 'inplus' or 'in', and packets that were considered Green and Yellow having input profile 'out'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics aggregate-statistics accepted-out-packets number</a>
<b>Tree</b>	<a href="#">accepted-out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **exceed-octets** *number*

<b>Description</b>	The number of octets in packets that were accepted having input profile 'exceed'. Available in both statistics-modes
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics aggregate-statistics exceed-octets number</a>
<b>Tree</b>	<a href="#">exceed-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **exceed-packets** *number*

<b>Description</b>	The number of packets that were accepted having input profile 'exceed'. Available in boths statistics-modes
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics aggregate-statistics exceed-packets number</a>
<b>Tree</b>	<a href="#">exceed-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the statistics associated with this policer were cleared
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics aggregate-statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**per-lag-member-statistics**

<b>Description</b>	The subinterface policer stats per member-fp
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics</a>
<b>Tree</b>	<a href="#">per-lag-member-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**linecard** *slot number*

<b>Description</b>	Line-card within the system
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**slot number**

<b>Description</b>	Numeric identifier for the linecard
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics per-lag-member-statistics linecard slot number</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-complex name keyword**

<b>Description</b>	Forwarding complex on the card
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name keyword</a>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**name keyword**

<b>Description</b>	Forwarding-complex name
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-policies policer policer-id reference policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**accepted-in-octets number**

<b>Description</b>	The number of octets in packets that were considered as Green by the policer and their input profile was 'in'. Not available in minimal statistics-mode
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-in-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-in-packets** *number*

<b>Description</b>	The number of packets that were considered as Green by the policer and their input profile was 'in'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-inplus-octets** *number*

<b>Description</b>	The number of octets in packets that were considered as Green by the policer and their input profile was 'inplus'. Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-inplus-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-inplus-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-inplus-packets** *number*

<b>Description</b>	The number of packets that were considered as Green by the policer and their input profile was 'inplus'.
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	Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-inplus-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-inplus-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-out-octets** *number*

<b>Description</b>	The number of octets in packets that were considered Yellow having input profile 'inplus' or 'in', and packets that were considered Green and Yellow having input profile 'out'.  Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-out-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **accepted-out-packets** *number*

<b>Description</b>	The number of packets that were considered Yellow having input profile 'inplus' or 'in', and packets that were considered Green and Yellow having input profile 'out'.  Not available in minimal statistics-mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">accepted-out-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**exceed-octets** *number*

<b>Description</b>	The number of octets in packets that were accepted having input profile 'exceed'. Available in both statistics-modes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <b>exceed-octets</b> <i>number</i>
<b>Tree</b>	<a href="#">exceed-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**exceed-packets** *number*

<b>Description</b>	The number of packets that were accepted having input profile 'exceed'. Available in boths statistics-modes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <b>exceed-packets</b> <i>number</i>
<b>Tree</b>	<a href="#">exceed-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the statistics associated with this policer were cleared
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-policies policer policer-id</a> <i>reference</i> <a href="#">policer-statistics per-lag-member-statistics linecard slot number forwarding-complex name</a> <i>keyword</i> <b>last-clear</b> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-policy** *reference*

<b>Description</b>	Policer-policy assigned to this subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies policer-policy reference</a>
<b>Tree</b>	<a href="#">policer-policy</a>
<b>Reference</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-templates**

<b>Description</b>	acl policers
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates</a>
<b>Tree</b>	<a href="#">policer-templates</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer** [sequence-id](#) *number*

<b>Description</b>	The list of policer instances belonging to the template definition.
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**sequence-id** *number*

<b>Description</b>	Policer sequence-id
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i>
<b>Range</b>	1 to 65535
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **committed-burst-size** *number*

**Description** The actual/operational maximum CIR bucket depth in bytes as it is programmed into hardware.

**Context** [qos interfaces interface interface-id](#) *string* [input policer-templates policer sequence-id](#) *number* [committed-burst-size](#) *number*

**Tree** [committed-burst-size](#)

**Units** bytes

**Configurable** False

**Platforms** Supported on all platforms

### **committed-rate-kbps** *number*

**Description** The actual/operational committed information rate (CIR) of the policer as it is programmed into hardware.

**Context** [qos interfaces interface interface-id](#) *string* [input policer-templates policer sequence-id](#) *number* [committed-rate-kbps](#) *number*

**Tree** [committed-rate-kbps](#)

**Units** kbps

**Configurable** False

**Platforms** Supported on all platforms

### **maximum-burst-size** *number*

**Description** The actual/operational maximum PIR bucket depth in bytes as it is programmed into hardware.

**Context** [qos interfaces interface interface-id](#) *string* [input policer-templates policer sequence-id](#) *number* [maximum-burst-size](#) *number*

**Tree** [maximum-burst-size](#)

**Units** bytes

**Configurable** False

**Platforms** Supported on all platforms

**peak-rate-kbps** *number*

<b>Description</b>	The actual/operational peak information rate (PIR) of the policer as it is programmed into hardware.
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-templates policer sequence-id</a> <i>number</i> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**accepted-octets** *number*

<b>Description</b>	The number of octets in packets that were accepted by the policer, counting all drop-probabilities at policer output Not available in forwarding-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics accepted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**accepted-packets** *number*

<b>Description</b>	The number of packets that were accepted by the policer, counting all drop-probabilities at policer output Not available in forwarding-focus mode
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics accepted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">accepted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **committed-octets** *number*

<b>Description</b>	The number of octets in packets that were accepted with low drop-probability at policer output Not available in violating-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics committed-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **committed-packets** *number*

<b>Description</b>	The number of packets that were accepted with low drop-probability at policer output Not available in violating-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics committed-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **exceeding-octets** *number*

<b>Description</b>	The number of octets in packets that were accepted with medium drop-probability at policer output Not available in violating-focus mode
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics exceeding-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeding-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **exceeding-packets** *number*

<b>Description</b>	The number of packets that were accepted with medium drop-probability at policer output Not available in violating-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics exceeding-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">exceeding-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **last-clear** *string*

<b>Description</b>	Time of the last clear command performed by the user at this level
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **violating-octets** *number*

<b>Description</b>	The number of octets in packets that were considered violating by the policer Not available in forwarding-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates policer sequence-id</a> <i>number</i> <a href="#">statistics violating-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">violating-octets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### violating-packets *number*

<b>Description</b>	The number of packets that were considered violating by the policer Not available in forwarding-focus mode
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-templates policer sequence-id number statistics violating-packets number</a>
<b>Tree</b>	<a href="#">violating-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### policer-template *reference*

<b>Description</b>	The name of the policer template applied to input traffic on the subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id string input policer-templates policer-template reference</a>
<b>Tree</b>	<a href="#">policer-template</a>
<b>Reference</b>	<a href="#">qos policer-templates policer-template name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### interface-ref

<b>Description</b>	Reference to an interface or subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id string interface-ref</a>
<b>Tree</b>	<a href="#">interface-ref</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface reference**

<b>Description</b>	Reference to a base interface, for example a port or LAG
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">interface-ref interface reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**subinterface reference**

<b>Description</b>	Reference to a subinterface  This requires the base interface to be specified using the interface leaf in this container
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">interface-ref subinterface reference</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**output**

<b>Description</b>	Top-level container for QoS configuration and state relating to egress traffic on the interface or subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**buffer-allocation-profile** *reference*

<b>Description</b>	Buffer-allocation-profile for interface output queues
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output buffer-allocation-profile reference</a>
<b>Tree</b>	<a href="#">buffer-allocation-profile</a>
<b>Reference</b>	<a href="#">qos buffer-management buffer-allocation-profile name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp-reclassify-policy** *reference*

<b>Description</b>	Reference to egress dscp-reclassification policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output dscp-reclassify-policy reference</a>
<b>Tree</b>	<a href="#">dscp-reclassify-policy</a>
<b>Reference</b>	<a href="#">qos classifiers dscp-reclassify-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-pool** *index number*

<b>Description</b>	List of interface-pools associated with the base interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output interface-pool index number</a>
<b>Tree</b>	<a href="#">interface-pool</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Interface-pool index
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output interface-pool index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-size** *number*

<b>Description</b>	Operational size of the interface-pool
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output interface-pool index</a> <i>number</i> <a href="#">operational-size</a> <i>number</i>
<b>Tree</b>	<a href="#">operational-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**used** *number*

<b>Description</b>	Actual usage of the interface-pool
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output interface-pool index</a> <i>number</i> <a href="#">used</a> <i>number</i>
<b>Tree</b>	<a href="#">used</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-pool-policy** *reference*

<b>Description</b>	Interface-pool-policy assigned to the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output interface-pool-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface-pool-policy</a>
<b>Reference</b>	<a href="#">qos buffer-management interface-pool-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**output-class-map** *reference*

<b>Description</b>	Reference to the name of output-class-map that applies to subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output output-class-map</a> <i>reference</i>
<b>Tree</b>	<a href="#">output-class-map</a>
<b>Reference</b>	<a href="#">qos output-class-map name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### output-class-map-pending *reference*

<b>Description</b>	List of interfaces, related to this subinterface, where the configured output-class-map is not yet operational
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output output-class-map-pending reference</a>
<b>Tree</b>	<a href="#">output-class-map-pending</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### queues

<b>Description</b>	Container for a list of queues that are instantiated on an interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues</a>
<b>Tree</b>	<a href="#">queues</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### queue [queue-name](#) *reference*

<b>Description</b>	List of queues
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name reference</a>
<b>Tree</b>	<a href="#">queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-name** *reference*

<b>Description</b>	The queue name
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-queue-management**

<b>Description</b>	Enter the active-queue-management context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management</a>
<b>Tree</b>	<a href="#">active-queue-management</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**wred-slope** [traffic-type](#) *keyword* [drop-probability](#) *keyword* [enable-ecn](#) *boolean*

<b>Description</b>	List of WRED slopes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i>
<b>Tree</b>	<a href="#">wred-slope</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**traffic-type** *keyword*

<b>Description</b>	The traffic type to which the WRED slope applies
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>tcp</b> Refers to IPv4/IPv6 packets with a protocol/next-header indicating a value of 6</li> <li>• <b>non-tcp</b> Refers to all packets that are not IPv4/IPv6 packets with a protocol/next-header indicating a value of 6</li> <li>• <b>all</b> Refers to all traffic, whether it is TCP or non-TCP</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **drop-probability** *keyword*

<b>Description</b>	The drop probability to which the WRED slope applies
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>low</b> Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green</li> <li>• <b>medium</b> Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow</li> <li>• <b>high</b> Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red</li> <li>• <b>all</b> All traffic, consisting of traffic marked low, medium and high drop-probability</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**enable-ecn** *boolean*

<b>Description</b>	Indicates that packets should be marked with ecn-bit when the result of wred-slope would discard the packet. It is mutually exclusive with 'drop' flag
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <b>enable-ecn</b> <i>boolean</i>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**drop** *boolean*

<b>Description</b>	Indicates that packets will be dropped based on WRED slope policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <b>enable-ecn</b> <i>boolean</i> <b>drop</b> <i>boolean</i>
<b>Tree</b>	<a href="#">drop</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**max-probability** *number*

<b>Description</b>	The maximum probability of dropping a packet (at or above the max-threshold).  On 7250 IXR-6/10 there can be a significant difference between the configured value and the operational value
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <b>enable-ecn</b> <i>boolean</i> <b>max-probability</b> <i>number</i>
<b>Tree</b>	<a href="#">max-probability</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **max-threshold-bytes** *number*

<b>Description</b>	The queue depth in bytes that corresponds to the WRED maximum threshold parameter
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">max-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">max-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **min-threshold-bytes** *number*

<b>Description</b>	The queue depth in bytes that corresponds to the WRED minimum threshold parameter
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">active-queue-management wred-slope traffic-type</a> <i>keyword</i> <a href="#">drop-probability</a> <i>keyword</i> <a href="#">enable-ecn</a> <i>boolean</i> <a href="#">min-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">min-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **forwarding-class** *string*

<b>Description</b>	The list of forwarding classes that map to this queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">forwarding-class</a> <i>string</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue-depth

**Description** Enter the queue-depth context

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-depth](#)

**Tree** [queue-depth](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## average-1 *number*

**Description** The average queue depth in the last 1 minutes using samples taken every polling-interval milliseconds

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-depth average-1](#) *number*

**Tree** [average-1](#)

**Units** bytes

**Configurable** False

**Platforms** 7220 IXR-H4

## average-15 *number*

**Description** The average queue depth in the last 15 minutes using samples taken every polling-interval milliseconds

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-depth average-15](#) *number*

**Tree** [average-15](#)

**Units** bytes

**Configurable** False

**Platforms** 7220 IXR-H4

**average-5** *number*

<b>Description</b>	The average queue depth in the last 5 minutes using samples taken every polling-interval milliseconds
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth average-5</a> <i>number</i>
<b>Tree</b>	<a href="#">average-5</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H4

**committed-burst-size** *number*

<b>Description</b>	Committed queue length in bytes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth committed-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H4, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**high-threshold-bytes** *number*

<b>Description</b>	The operational hardware value of the high threshold in bytes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth high-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**high-watermark-1** *number*

<b>Description</b>	The highest queue depth in the last 1 minutes using samples taken every polling-interval milliseconds
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth high-watermark-1</a> <i>number</i>
<b>Tree</b>	<a href="#">high-watermark-1</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H4

### **high-watermark-15** *number*

<b>Description</b>	The highest queue depth in the last 15 minutes using samples taken every polling-interval milliseconds
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth high-watermark-15</a> <i>number</i>
<b>Tree</b>	<a href="#">high-watermark-15</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H4

### **high-watermark-5** *number*

<b>Description</b>	The highest queue depth in the last 5 minutes using samples taken every polling-interval milliseconds
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth high-watermark-5</a> <i>number</i>
<b>Tree</b>	<a href="#">high-watermark-5</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-H4

### **last-high-threshold-time** *string*

<b>Description</b>	The last time the queue depth exceeded the high-threshold in a rising direction
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-depth last-high-threshold-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-high-threshold-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### maximum-burst-size *number*

**Description** Maximum queue depth in bytes

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-depth maximum-burst-size number](#)

**Tree** [maximum-burst-size](#)

**Units** bytes

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### missed-polling-intervals *number*

**Description** The number of samples that were expected, but did not arrive fast enough to be included in the average and high-watermark calculations

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-depth missed-polling-intervals number](#)

**Tree** [missed-polling-intervals](#)

**Configurable** False

**Platforms** 7220 IXR-H4

### queue-management-profile *reference*

**Description** The queue management profile that is to be used for the queue on the interface.  
For example, the system may use a profile which specifies that WRED curves are used for setting an ECN mark in the IP header instead of dropping a packet in order to signal impending congestion and for determining when there is sufficient congestion to tail drop packets

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-management-profile reference](#)

**Tree** [queue-management-profile](#)

**Reference** [qos buffer-management queue-management-profile name string](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## queue-statistics

**Description** Enter the queue-statistics context

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics](#)

**Tree** [queue-statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## aggregate-statistics

**Description** Aggregate queue statistics per interface-queue or subinterface-queue

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics aggregate-statistics](#)

**Tree** [aggregate-statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ecn-marked-octets *number*

**Description** Number of octets in packets in which the ECN codepoint was changed from ECT to CE

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics aggregate-statistics ecn-marked-octets](#) *number*

**Tree** [ecn-marked-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**ecn-marked-packets** *number*

<b>Description</b>	Number of packets in which the ECN codepoint was changed from ECT to CE
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics ecn-marked-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">ecn-marked-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**egq-dropped-octets** *number*

<b>Description</b>	Number of octets dropped by the queue at egress
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics egq-dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">egq-dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**egq-dropped-packets** *number*

<b>Description</b>	Number of packets dropped by the queue at egress
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics egq-dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">egq-dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**exceed-profile**

<b>Description</b>	Stats for packets marked with Exceed profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics exceed-profile</a>



<b>Tree</b>	<a href="#">exceed-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-octets *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics exceed-profile dropped-octets number</a>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-packets *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics exceed-profile dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-octets *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics exceed-profile transmitted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics exceed-profile transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### in-plus-profile

<b>Description</b>	Stats for packets marked with In-Plus profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics in-plus-profile</a>
<b>Tree</b>	<a href="#">in-plus-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics in-plus-profile</a> <a href="#">dropped-octets number</a>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics in-plus-profile</a> <a href="#">dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics in-plus-profile</a> <a href="#">transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics in-plus-profile transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### in-profile

<b>Description</b>	Stats for packets marked with In profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics in-profile</a>
<b>Tree</b>	<a href="#">in-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-octets *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics in-profile dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-packets *number*

**Description** Number of packets transmitted by the queue dropped by the queue

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics aggregate-statistics in-profile](#) [dropped-packets number](#)

**Tree** [dropped-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-octets *number*

**Description** Number of octets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics aggregate-statistics in-profile](#) [transmitted-octets number](#)

**Tree** [transmitted-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

**Description** Number of packets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics aggregate-statistics in-profile](#) [transmitted-packets number](#)

<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Timestamp of the last time the statistics associated with this queue were cleared
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-profile**

<b>Description</b>	Stats for packets marked with Out profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics out-profile</a>
<b>Tree</b>	<a href="#">out-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics out-profile dropped-octets</a> <i>number</i>

<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics out-profile dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics out-profile transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics out-profile transmitted-packets number</a>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-depth**

<b>Description</b>	Enter the queue-depth context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics queue-depth</a>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**high-threshold-bytes** *number*

<b>Description</b>	The operational hardware value of the high threshold in bytes
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics queue-depth high-threshold-bytes number</a>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**last-high-threshold-time** *string*

<b>Description</b>	The last time the queue depth exceeded the high-threshold in a rising direction
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics queue-depth last-high-threshold-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-high-threshold-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**virtual-output-queue** *slot number*

<b>Description</b>	List of virtual output queues that can send traffic to this egress queue. The list always has one entry for each IMM slot in the chassis, even if one or more slots are empty
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics virtual-output-queue slot number</a>
<b>Tree</b>	<a href="#">virtual-output-queue</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**slot number**

<b>Description</b>	The slot identifier for the virtual output queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics virtual-output-queue slot number</a>
<b>Range</b>	1 to 8
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## high-drop-probability

<b>Description</b>	The unicast statistics unicast packets transmitted from the VOQ to the egress queue that were classified as high drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics virtual-output-queue slot number</a> <a href="#">high-drop-probability</a>
<b>Tree</b>	<a href="#">high-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## dropped-octets *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics virtual-output-queue slot number</a> <a href="#">high-drop-probability</a> <a href="#">dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## dropped-packets *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <a href="#">reference queue-statistics aggregate-statistics virtual-output-queue slot number</a> <a href="#">high-drop-probability</a> <a href="#">dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number high-drop-probability transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number high-drop-probability transmitted-packets number</a>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**low-drop-probability**

<b>Description</b>	The unicast statistics from the VOQ to the egress queue that were classified as low drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number low-drop-probability</a>
<b>Tree</b>	<a href="#">low-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number low-drop-probability dropped-octets number</a>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number low-drop-probability dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number low-drop-probability transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**medium-drop-probability**

<b>Description</b>	The unicast statistics from the VOQ to the egress queue that were classified as medium drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics virtual-output-queue slot</a> <i>number</i> <a href="#">medium-drop-probability</a>
<b>Tree</b>	<a href="#">medium-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics aggregate-statistics virtual-output-queue slot</a> <i>number</i> <a href="#">medium-drop-probability dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number medium-drop-probability dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number medium-drop-probability transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics aggregate-statistics virtual-output-queue slot number medium-drop-probability transmitted-packets number</a>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## queue-depth

<b>Description</b>	Enter the queue-depth context
<b>Context</b>	<a href="#">qos</a> <a href="#">interfaces</a> <a href="#">interface</a> <a href="#">interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">queues</a> <a href="#">queue</a> <a href="#">queue-name</a> <a href="#">reference</a> <a href="#">queue-statistics</a> <a href="#">aggregate-statistics</a> <a href="#">virtual-output-queue</a> <a href="#">slot</a> <a href="#">number</a> <a href="#">queue-depth</a>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## high-threshold-bytes *number*

<b>Description</b>	The operational hardware value of the high threshold in bytes
<b>Context</b>	<a href="#">qos</a> <a href="#">interfaces</a> <a href="#">interface</a> <a href="#">interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">queues</a> <a href="#">queue</a> <a href="#">queue-name</a> <a href="#">reference</a> <a href="#">queue-statistics</a> <a href="#">aggregate-statistics</a> <a href="#">virtual-output-queue</a> <a href="#">slot</a> <a href="#">number</a> <a href="#">queue-depth</a> <a href="#">high-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## last-high-threshold-time *string*

<b>Description</b>	The last time the depth of either VOQ associated with this slot exceeded the high-threshold in a rising direction
<b>Context</b>	<a href="#">qos</a> <a href="#">interfaces</a> <a href="#">interface</a> <a href="#">interface-id</a> <i>string</i> <a href="#">output</a> <a href="#">queues</a> <a href="#">queue</a> <a href="#">queue-name</a> <a href="#">reference</a> <a href="#">queue-statistics</a> <a href="#">aggregate-statistics</a> <a href="#">virtual-output-queue</a> <a href="#">slot</a> <a href="#">number</a> <a href="#">queue-depth</a> <a href="#">last-high-threshold-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-high-threshold-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## per-lag-member-statistics

<b>Description</b>	Queue statistics per-LAG member. These statistics are relevant only for LAG
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name reference queue-statistics per-lag-member-statistics</a>
<b>Tree</b>	<a href="#">per-lag-member-statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **member-interface** [member-interface-name](#) *string*

<b>Description</b>	Enter the member-interface list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">member-interface</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **member-interface-name** *string*

<b>Description</b>	Enter the member-interface-name context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecn-marked-octets** *number*

<b>Description</b>	Number of octets in packets in which the ECN codepoint was changed from ECT to CE
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">ecn-marked-octets</a> <i>number</i>



<b>Tree</b>	<a href="#">ecn-marked-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **ecn-marked-packets** *number*

<b>Description</b>	Number of packets in which the ECN codepoint was changed from ECT to CE
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">ecn-marked-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">ecn-marked-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **egq-dropped-octets** *number*

<b>Description</b>	Number of octets dropped by the queue at egress
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">egq-dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">egq-dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **egq-dropped-packets** *number*

<b>Description</b>	Number of packets dropped by the queue at egress
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">egq-dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">egq-dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## exceed-profile

**Description** Stats for packets marked with Exceed profile transmitted by the queue

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string exceed-profile](#)

**Tree** [exceed-profile](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dropped-octets *number*

**Description** Number of octets transmitted by the queue dropped by the queue

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string exceed-profile dropped-octets number](#)

**Tree** [dropped-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dropped-packets *number*

**Description** Number of packets transmitted by the queue dropped by the queue

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string exceed-profile dropped-packets number](#)

**Tree** [dropped-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-octets *number*

**Description** Number of octets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [exceed-profile transmitted-octets](#) *number*

**Tree** [transmitted-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

**Description** Number of packets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [exceed-profile transmitted-packets](#) *number*

**Tree** [transmitted-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### in-plus-profile

**Description** Stats for packets marked with In-Plus profile transmitted by the queue

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [in-plus-profile](#)

<b>Tree</b>	<a href="#">in-plus-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-octets *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-plus-profile</a> <a href="#">dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-packets *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-plus-profile</a> <a href="#">dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-octets *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-plus-profile transmitted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-plus-profile transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-profile**

<b>Description</b>	Stats for packets marked with In profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-profile</a>
<b>Tree</b>	<a href="#">in-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string in-profile dropped-octets number</a>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string in-profile dropped-packets number</a>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string in-profile transmitted-octets number</a>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">in-profile transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### out-profile

<b>Description</b>	Stats for packets marked with Out profile transmitted by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">out-profile</a>
<b>Tree</b>	<a href="#">out-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-octets *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">out-profile dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dropped-packets *number*

**Description** Number of packets transmitted by the queue dropped by the queue

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [out-profile dropped-packets](#) *number*

**Tree** [dropped-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-octets *number*

**Description** Number of octets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [out-profile transmitted-octets](#) *number*

**Tree** [transmitted-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### transmitted-packets *number*

**Description** Number of packets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) *reference* [queue-statistics per-lag-member-statistics member-interface member-interface-name](#) *string* [out-profile transmitted-packets](#) *number*



<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue-depth

<b>Description</b>	Enter the queue-depth context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">queue-depth</a>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## high-threshold-bytes *number*

<b>Description</b>	The operational hardware value of the high threshold in bytes
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">queue-depth high-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-high-threshold-time *string*

<b>Description</b>	The last time the queue depth exceeded the high-threshold in a rising direction
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">queue-depth last-high-threshold-time</a> <i>string</i>
<b>Tree</b>	<a href="#">last-high-threshold-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### virtual-output-queue [slot number](#)

<b>Description</b>	List of virtual output queues that can send traffic to this egress queue. The list always has one entry for each IMM slot in the chassis, even if one or more slots are empty
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot number</a>
<b>Tree</b>	<a href="#">virtual-output-queue</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### slot number

<b>Description</b>	The slot identifier for the virtual output queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot number</a>
<b>Range</b>	1 to 8
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### high-drop-probability

<b>Description</b>	The unicast statistics unicast packets transmitted from the VOQ to the egress queue that were classified as high drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">high-drop-probability</a>
<b>Tree</b>	<a href="#">high-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">high-drop-probability</a> <a href="#">dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">high-drop-probability</a> <a href="#">dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">high-drop-probability transmitted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">high-drop-probability transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **low-drop-probability**

<b>Description</b>	The unicast statistics from the VOQ to the egress queue that were classified as low drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability</a>
<b>Tree</b>	<a href="#">low-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability</a> <a href="#">dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability</a> <a href="#">dropped-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability</a> <a href="#">transmitted-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**transmitted-packets** *number*

<b>Description</b>	Number of packets transmitted by the queue, including transit traffic and locally originated traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">low-drop-probability transmitted-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">transmitted-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**medium-drop-probability**

<b>Description</b>	The unicast statistics from the VOQ to the egress queue that were classified as medium drop-probability. This reads 0 when the IMM associated with the VOQ is not inserted and it resets to 0 whenever the IMM associated with the VOQ is removed
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">medium-drop-probability</a>
<b>Tree</b>	<a href="#">medium-drop-probability</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**dropped-octets** *number*

<b>Description</b>	Number of octets transmitted by the queue dropped by the queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">queue-statistics per-lag-member-statistics member-interface member-interface-name</a> <i>string</i> <a href="#">virtual-output-queue slot</a> <i>number</i> <a href="#">medium-drop-probability dropped-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">dropped-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### dropped-packets *number*

**Description** Number of packets transmitted by the queue dropped by the queue

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number medium-drop-probability dropped-packets number](#)

**Tree** [dropped-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### transmitted-octets *number*

**Description** Number of octets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number medium-drop-probability transmitted-octets number](#)

**Tree** [transmitted-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### transmitted-packets *number*

**Description** Number of packets transmitted by the queue, including transit traffic and locally originated traffic

**Context** [qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number medium-drop-probability transmitted-packets number](#)

**Tree** [transmitted-packets](#)

**Default** 0

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## queue-depth

<b>Description</b>	Enter the queue-depth context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number queue-depth</a>
<b>Tree</b>	<a href="#">queue-depth</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## high-threshold-bytes *number*

<b>Description</b>	The operational hardware value of the high threshold in bytes
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number queue-depth high-threshold-bytes number</a>
<b>Tree</b>	<a href="#">high-threshold-bytes</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## last-high-threshold-time *string*

<b>Description</b>	The last time the depth of either VOQ associated with this slot exceeded the high-threshold in a rising direction
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output queues queue queue-name reference queue-statistics per-lag-member-statistics member-interface member-interface-name string virtual-output-queue slot number queue-depth last-high-threshold-time string</a>
<b>Tree</b>	<a href="#">last-high-threshold-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### queue-type *keyword*

**Description** Indicates whether given queue is local to subinterface or interface-queue

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) [reference queue-type keyword](#)

**Tree** [queue-type](#)

**Options**

- local
- interface-queue

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### scheduling

**Description** Container for queue scheduling parameters

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) [reference scheduling](#)

**Tree** [scheduling](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peak-rate-bps *number*

**Description** The actual/operational peak rate in bits per second

**Context** [qos interfaces interface interface-id](#) *string* [output queues queue queue-name](#) [reference scheduling peak-rate-bps number](#)

**Tree** [peak-rate-bps](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**peak-rate-percent** *number*

<b>Description</b>	The maximum percentage of port bandwidth that is available to the traffic in this queue during the PIR scheduling loop. The default is 100
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">scheduling peak-rate-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-percent</a>
<b>Range</b>	1 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**scheduling-class** *number*

<b>Description</b>	The scheduling-class for output-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">scheduling scheduling-class</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduling-class</a>
<b>Range</b>	0   2   4   6
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**strict-priority** *boolean*

<b>Description</b>	When set to true the queue is serviced as a strict priority queue, regardless of whether a weight is configured or its value. When set to false the queue is serviced using WRR, even if the queue does not have a configured weight; in this case the default weight value of 1 is used
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">scheduling strict-priority</a> <i>boolean</i>
<b>Tree</b>	<a href="#">strict-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**weight number**

<b>Description</b>	Configures the relative weight of a queue. For DWRR, this is determined by the scheduler policy For Strict Priority the weight is as follows J2: unicast-0..unicast-7 -> weight 9..16 multicast-0..multicast-7 -> weight 1..8 TD3 (D2/D3/D5): unicast-0..unicast-7 -> weight 1..8 multicast-0..multicast-7 -> weight 1..8 TH3: unicast-0 -> weight 2 unicast-1 -> weight 3 unicast-2 -> weight 5 unicast-3 -> weight 6 unicast-4 -> weight 8 unicast-5 -> weight 9 unicast-6 -> weight 11 unicast-7 -> weight 12 multicast-0 -> weight 1 multicast-1 -> weight 4 multicast-2 -> weight 7 multicast-3 -> weight 10
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>reference</i> <a href="#">scheduling weight number</a>
<b>Tree</b>	<a href="#">weight</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rewrite-rules**

<b>Description</b>	Enable the rewrite-rules context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules</a>
<b>Tree</b>	<a href="#">rewrite-rules</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dot1p-policy reference**

<b>Description</b>	Reference to the name of a dot1p rewrite policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules dot1p-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">dot1p-policy</a>

<b>Reference</b>	<a href="#">qos rewrite-rules dot1p-policy name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp-policy** *reference*

<b>Description</b>	Reference to the name of a DSCP rewrite-rule policy that applies to both IPv4 and IPv6 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output rewrite-rules dscp-policy reference</a>
<b>Tree</b>	<a href="#">dscp-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules dscp-policy name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp-rewrite**

<b>Description</b>	Enable the dscp-rewrite context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output rewrite-rules dscp-rewrite</a>
<b>Tree</b>	<a href="#">dscp-rewrite</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **force-rewrite-trusted** *boolean*

<b>Description</b>	Enables remarking packets incoming on trusted interfaces
<b>Context</b>	<a href="#">qos interfaces interface interface-id string output rewrite-rules dscp-rewrite force-rewrite-trusted boolean</a>
<b>Tree</b>	<a href="#">force-rewrite-trusted</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-dscp-policy** *reference*

<b>Description</b>	Reference to the name of a DSCP rewrite-rule policy that applies only to IPv4 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules ipv4-dscp-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">ipv4-dscp-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**ipv6-dscp-policy** *reference*

<b>Description</b>	Reference to the name of a DSCP rewrite-rule policy that applies only to IPv6 traffic
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules ipv6-dscp-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">ipv6-dscp-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**mpls-traffic-class-policy** *reference*

<b>Description</b>	Reference to the name of an MPLS traffic-class rewrite-rule policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules mpls-traffic-class-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">mpls-traffic-class-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**qinq-rewrite-outer-only** *boolean*

<b>Description</b>	Enables remarking only outer-dot1p bits
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output rewrite-rules qinq-rewrite-outer-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">qinq-rewrite-outer-only</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## scheduler

<b>Description</b>	Output traffic scheduler options
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler</a>
<b>Tree</b>	<a href="#">scheduler</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue-scheduler [sequence-id](#) *number*

<b>Description</b>	List of queue-schedulers created at the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler queue-scheduler sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">queue-scheduler</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## sequence-id *number*

<b>Description</b>	Sequence-id of the scheduler as configured in the respective queue-scheduling-policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler queue-scheduler sequence-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-instance** *interface-name string*

<b>Description</b>	List of interface instances
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler queue-scheduler sequence-id number interface-instance interface-name string</a>
<b>Tree</b>	<a href="#">interface-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Enter the interface-name context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler queue-scheduler sequence-id number interface-instance interface-name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate-kbps** *number*

<b>Description</b>	Enter the peak-rate-kbps context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler queue-scheduler sequence-id number interface-instance interface-name string</a> <a href="#">peak-rate-kbps number</a>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-inputs** *string*

<b>Description</b>	List of queues feeding the tier-0 queue-scheduler
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler queue-scheduler sequence-id number queue-inputs string</a>
<b>Tree</b>	<a href="#">queue-inputs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**scheduler-inputs** *number*

<b>Description</b>	List of tier-0 queue-schedulers feeding the tier-1 queue-scheduler
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler queue-scheduler sequence-id</a> <i>number</i> <a href="#">scheduler-inputs</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduler-inputs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-scheduling-policy** *reference*

<b>Description</b>	Queue level scheduling policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler queue-scheduling-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">queue-scheduling-policy</a>
<b>Reference</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sched-class-scheduler** [sequence-id](#) *number*

<b>Description</b>	List of scheduling-class-schedulers created at the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler sched-class-scheduler sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">sched-class-scheduler</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sequence-id** *number*

<b>Description</b>	Sequence-id of the scheduler as configured in the respective sched-class-scheduling-policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler sched-class-scheduler sequence-id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**interface-instance** *interface-name string*

<b>Description</b>	List of interface instances
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler sched-class-scheduler sequence-id number</a> <a href="#">interface-instance interface-name string</a>
<b>Tree</b>	<a href="#">interface-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Enter the interface-name context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler sched-class-scheduler sequence-id number</a> <a href="#">interface-instance interface-name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate-kbps** *number*

<b>Description</b>	Enter the peak-rate-kbps context
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler sched-class-scheduler sequence-id number</a> <a href="#">interface-instance interface-name string</a> <a href="#">peak-rate-kbps number</a>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sched-class-inputs** *number*

<b>Description</b>	List of scheduling-classes feeding the tier-0 sched-class-scheduler
<b>Context</b>	<a href="#">qos interfaces interface interface-id string</a> <a href="#">output scheduler sched-class-scheduler sequence-id number</a> <a href="#">sched-class-inputs number</a>
<b>Tree</b>	<a href="#">sched-class-inputs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**scheduler-inputs** *number*

<b>Description</b>	List of tier-0 sched-class-schedulers feeding the tier-1 sched-class-scheduler
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler sched-class-scheduler sequence-id</a> <i>number</i> <a href="#">scheduler-inputs</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduler-inputs</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**sched-class-scheduling-policy** *reference*

<b>Description</b>	Interface level scheduling policy
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler sched-class-scheduling-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">sched-class-scheduling-policy</a>
<b>Reference</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy</a> <i>name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**scheduler-policy** *reference*

<b>Description</b>	The scheduler policy to be applied to traffic on this interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler scheduler-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">scheduler-policy</a>
<b>Reference</b>	<a href="#">qos scheduler-policies scheduler-policy</a> <i>name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**scheduling-resources-pools**

<b>Description</b>	Lists the scheduling resources pools that the given interface is using
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler scheduling-resources-pools</a>
<b>Tree</b>	<a href="#">scheduling-resources-pools</a>

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-group-resource-pool *number*

<b>Description</b>	Interface-group-resource-pool from which the interface obtains scheduling resources
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler scheduling-resources-pools interface-group-resource-pool</a> <i>number</i>
<b>Tree</b>	<a href="#">interface-group-resource-pool</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### resource-set-pool *number*

<b>Description</b>	Resource-set-pool from which the interface obtains scheduling resources
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output scheduler scheduling-resources-pools resource-set-pool</a> <i>number</i>
<b>Tree</b>	<a href="#">resource-set-pool</a>
<b>Range</b>	0 to 1
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### pfc

<b>Description</b>	Parameters and information related to PFC on the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a>
<b>Tree</b>	<a href="#">pfc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### deadlock-detection-timer *number*

<b>Description</b>	The actual value of deadlock-detection-timer
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<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc deadlock-detection-timer number</a>
<b>Tree</b>	<a href="#">deadlock-detection-timer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Details if the PFC feature is operationally available
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot</li> </ul>

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-enable** *boolean*

**Description**

Enables/disables reaction to received pfc-frames for a given interface

**Context**

[qos interfaces interface interface-id](#) *string* [pfc pfc-enable](#) *boolean*

**Tree**

[pfc-enable](#)

**Default**

false

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-mapping-profile** *reference*

**Description**

Assigns a pfc-mapping-profile to the interface. There is always default pfc-mapping-profile assigned named 'default'

**Context**

[qos interfaces interface interface-id](#) *string* [pfc pfc-mapping-profile](#) *reference*

**Tree**

[pfc-mapping-profile](#)

**Reference**

[qos pfc-mapping-profile name](#) *string*

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pfc-queue** [pfc-queue-name](#) *reference*

<b>Description</b>	List of pfc-queues
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">pfc-queue</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pfc-queue-name** *reference*

<b>Description</b>	The pfc-queue name
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos queues pfc-queue</a> <a href="#">pfc-queue-name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class** *reference*

<b>Description</b>	The forwarding class mapped in the given pfc-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i> <a href="#">forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class</a> <i>name</i> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pfc-committed-burst-size** *number*

<b>Description</b>	Displays the actual committed-burst-size of the pfc-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a> <a href="#">pfc-queue</a> <a href="#">pfc-queue-name</a> <i>reference</i> <a href="#">pfc-committed-burst-size</a> <i>number</i>

<b>Tree</b>	<a href="#">pfc-committed-burst-size</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **pfc-maximum-burst-size** *number*

<b>Description</b>	Displays the actual maximum-burst-size of the pfc-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-maximum-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-maximum-burst-size</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### **pfc-maximum-pfc-reserved-share** *number*

<b>Description</b>	Displays the actual maximum share the pfc-queue can take from pfc-reserved buffer configured per given forwarding-complex
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-maximum-pfc-reserved-share</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-maximum-pfc-reserved-share</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-off-threshold-bytes** *number*

<b>Description</b>	Displays the actual off-threshold of the pfc-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-off-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-off-threshold-bytes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pfc-on-threshold-bytes** *number*

<b>Description</b>	Displays the actual on-threshold of the pfc-queue
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-on-threshold-bytes</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-on-threshold-bytes</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**source-pfc-mac** *string*

<b>Description</b>	MAC address used as source-mac address used in generated pfc-pause-frames on the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc source-pfc-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">source-pfc-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Statistics related to PFC functionality
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the statistics associated with this queue were cleared
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>



<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-priority** *index number*

<b>Description</b>	Enter the pfc-priority list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number</a>
<b>Tree</b>	<a href="#">pfc-priority</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index** *number*

<b>Description</b>	PFC-priority index
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **deadlock-recovery-occurrences** *number*

<b>Description</b>	Number of deadlock recovery events
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number</a> <a href="#">deadlock-recovery-occurrences number</a>
<b>Tree</b>	<a href="#">deadlock-recovery-occurrences</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-pause-frames-generated** *number*

<b>Description</b>	Number of pfc-pause-frames generated on the interface for a given pfc-priority
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number pfc-pause-frames-generated</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-pause-frames-generated</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-pause-frames-received** *number*

<b>Description</b>	Number of pfc-pause-frames received on the interface and given pfc-priority
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number pfc-pause-frames-received</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-pause-frames-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pfc-transitions** *number*

<b>Description</b>	Number of transitions PFC-ON --> PFC-OFF on the interface for a given pfc-priority
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics pfc-priority index number pfc-transitions</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-transitions</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-packet-pfc-discards** *number*

<b>Description</b>	Total number of packets discarded because pfc-buffer-allocation was depleted. Under normal condition this counter should not be incremented
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics total-packet-pfc-discards</a> <i>number</i>
<b>Tree</b>	<a href="#">total-packet-pfc-discards</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-pfc-pause-frames-generated** *number*

<b>Description</b>	Total number of pfc-pause-frames generated on the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics total-pfc-pause-frames-generated</a> <i>number</i>
<b>Tree</b>	<a href="#">total-pfc-pause-frames-generated</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-pfc-pause-frames-received** *number*

<b>Description</b>	Total number of pfc-pause-frames received on the interface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc statistics total-pfc-pause-frames-received</a> <i>number</i>
<b>Tree</b>	<a href="#">total-pfc-pause-frames-received</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**linecard** [slot](#) *number*

<b>Description</b>	Container for QoS linecard configuration
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<b>Context</b>	<a href="#">qos linecard slot number</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**slot number**

<b>Description</b>	Numeric identifier for the linecard
<b>Context</b>	<a href="#">qos linecard slot number</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-complex name keyword**

<b>Description</b>	List of forwarding complexes on the card
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name keyword</a>
<b>Tree</b>	<a href="#">forwarding-complex</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name keyword**

<b>Description</b>	Forwarding-complex name
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250

IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## input

<b>Description</b>	QoS input parameters at forwarding-complex level
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## pfc-buffer-reservation *number*

<b>Description</b>	Percentage of the buffer reserved for accommodating incoming traffic while upstream node reacts to generated PFC-pause frames
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">input</a> <a href="#">pfc-buffer-reservation number</a>
<b>Tree</b>	<a href="#">pfc-buffer-reservation</a>
<b>Range</b>	0 to 100
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

## pfc-reserved-buffer-size *number*

<b>Description</b>	Displays the actual size of pfc-reserved buffer in bytes
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name</a> <i>keyword</i> <a href="#">input</a> <a href="#">pfc-reserved-buffer-size number</a>
<b>Tree</b>	<a href="#">pfc-reserved-buffer-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## output

<b>Description</b>	QoS output parameters at forwarding-complex level
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<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name keyword output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **fp-pool-policy** *reference*

<b>Description</b>	FP-pool-policy assigned to the forwarding-complex
<b>Context</b>	<a href="#">qos linecard slot number forwarding-complex name keyword output fp-pool-policy reference</a>
<b>Tree</b>	<a href="#">fp-pool-policy</a>
<b>Default</b>	default
<b>Reference</b>	<a href="#">qos buffer-management fp-pool-policy name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **output-class-map** *name string*

<b>Description</b>	Enter the output-class-map list instance
<b>Context</b>	<a href="#">qos output-class-map name string</a>
<b>Tree</b>	<a href="#">output-class-map</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	64

### **name** *string*

<b>Description</b>	User defined output-class-map name
<b>Context</b>	<a href="#">qos output-class-map name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *name reference*

**Description** Enter the forwarding-class list instance

**Context** [qos output-class-map name string forwarding-class name reference](#)

**Tree** [forwarding-class](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *reference*

**Description** The forwarding class

**Context** [qos output-class-map name string forwarding-class name reference](#)

**Reference** [qos forwarding-classes forwarding-class name string](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### queue

**Description** Container used to define whether local subinterface should be created or re-direction to remote queue at interface level should be used

**Context** [qos output-class-map name string forwarding-class name reference queue](#)

**Tree** [queue](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *reference*

<b>Description</b>	The queue name
<b>Context</b>	<a href="#">qos output-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">queue name</a> <i>reference</i>
<b>Tree</b>	<a href="#">name</a>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**re-direct-to** *keyword*

<b>Description</b>	The re-direction to interface level queue
<b>Context</b>	<a href="#">qos output-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">queue re-direct-to</a> <i>keyword</i>
<b>Tree</b>	<a href="#">re-direct-to</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• remote</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**slope-policy** *reference*

<b>Description</b>	Slope-policy assigned to the forwarding-class
<b>Context</b>	<a href="#">qos output-class-map name</a> <i>string</i> <a href="#">forwarding-class name</a> <i>reference</i> <a href="#">slope-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">slope-policy</a>
<b>Reference</b>	<a href="#">qos buffer-management slope-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**pfc-mapping-profile** *name string*

<b>Description</b>	Enter the pfc-mapping-profile list instance
<b>Context</b>	<a href="#">qos pfc-mapping-profile name string</a>
<b>Tree</b>	<a href="#">pfc-mapping-profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	7

**name** *string*

<b>Description</b>	User defined pfc-mapping-profile name. The name 'default' is reserved for system use
<b>Context</b>	<a href="#">qos pfc-mapping-profile name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**received-pfc-pause-frames**

<b>Description</b>	Parameters describing the behaviour when pfc-pause-frames are received on outgoing interface
<b>Context</b>	<a href="#">qos pfc-mapping-profile name string received-pfc-pause-frames</a>
<b>Tree</b>	<a href="#">received-pfc-pause-frames</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**deadlock**

<b>Description</b>	Parameters related to avoid a deadlock related to pfc on outgoing interface
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<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames</a> <a href="#">deadlock</a>
<b>Tree</b>	<a href="#">deadlock</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**detection-timer** *number*

<b>Description</b>	Number of milliseconds during which outgoing interface is receiving pfc-pause-frames before triggering recovery-timer
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames</a> <a href="#">deadlock</a> <a href="#">detection-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">detection-timer</a>
<b>Range</b>	10 to 1500
<b>Default</b>	750
<b>Units</b>	millisecond
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**enable** *boolean*

<b>Description</b>	Enables/disables deadlock mechanism
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames</a> <a href="#">deadlock</a> <a href="#">enable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**recovery-timer number**

<b>Description</b>	Number of milliseconds during which the pfc-pause-frames will be ignored
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames deadlock recovery-timer</a> <i>number</i>
<b>Tree</b>	<a href="#">recovery-timer</a>
<b>Range</b>	100 to 1500
<b>Default</b>	750
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue [queue-name](#) reference**

<b>Description</b>	List of egress-queue which should react to PFC-pause-frames
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames queue</a> <a href="#">queue-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-name reference**

<b>Description</b>	Egress-queue name
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames queue</a> <a href="#">queue-name</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**enable-pfc** *boolean*

<b>Description</b>	Enables/disables reaction to received pfc-frames for a given pfc-priority
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames queue queue-name</a> <i>reference</i> <a href="#">enable-pfc</a> <i>boolean</i>
<b>Tree</b>	<a href="#">enable-pfc</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pfc-pause-frame-priority** *number*

<b>Description</b>	The pfc-priority received in pfc-pause-frame
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-pfc-pause-frames queue queue-name</a> <i>reference</i> <a href="#">pfc-pause-frame-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-pause-frame-priority</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**received-traffic**

<b>Description</b>	Parameters related to receiving traffic for pfc-generation
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-traffic</a>
<b>Tree</b>	<a href="#">received-traffic</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**unicast-mapping**

<b>Description</b>	Parameters defing mapping of incoming unicast traffic into a pfc-queues
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<b>Context</b>	qos pfc-mapping-profile name <i>string</i> received-traffic unicast-mapping
<b>Tree</b>	unicast-mapping
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### pfc-queue pfc-queue-name *reference*

<b>Description</b>	Enter the pfc-queue list instance
<b>Context</b>	qos pfc-mapping-profile name <i>string</i> received-traffic unicast-mapping pfc-queue pfc-queue-name <i>reference</i>
<b>Tree</b>	pfc-queue
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### pfc-queue-name *reference*

<b>Description</b>	PFC-queue the packets should be mapped to
<b>Context</b>	qos pfc-mapping-profile name <i>string</i> received-traffic unicast-mapping pfc-queue pfc-queue-name <i>reference</i>
<b>Reference</b>	qos queues pfc-queue pfc-queue-name <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

### dot1p *number*

<b>Description</b>	List of dot1p values of the packets which will be assigned to a given pfc-queue
<b>Context</b>	qos pfc-mapping-profile name <i>string</i> received-traffic unicast-mapping pfc-queue pfc-queue-name <i>reference</i> dot1p <i>number</i>
<b>Tree</b>	dot1p
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**forwarding-class** *reference*

<b>Description</b>	List of forwarding-classes which packets are assigned to a given pfc-queue for untagged routed-interfaces
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-traffic unicast-mapping pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4

**pfc-pause-frame-priority** *number*

<b>Description</b>	PFC priorities indicated in generated pfc-pause-frame if congestion occurs in a given pfc-queue
<b>Context</b>	<a href="#">qos pfc-mapping-profile name</a> <i>string</i> <a href="#">received-traffic unicast-mapping pfc-queue pfc-queue-name</a> <i>reference</i> <a href="#">pfc-pause-frame-priority</a> <i>number</i>
<b>Tree</b>	<a href="#">pfc-pause-frame-priority</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4
<b>Max. Elements</b>	1

**policer-policies**

<b>Description</b>	Policer-policies for subinterface level traffic metering
<b>Context</b>	<a href="#">qos policer-policies</a>
<b>Tree</b>	<a href="#">policer-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**parent-policer-threshold-policy** *name string*

<b>Description</b>	List of policies defining parent-policer-thresholds and related parameters
<b>Context</b>	<a href="#">qos policer-policies parent-policer-threshold-policy</a> <i>name string</i>
<b>Tree</b>	<a href="#">parent-policer-threshold-policy</a>
<b>Configurable</b>	True

<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	16

**name** *string*

<b>Description</b>	The name assigned to the parent-policer-threshold-policy
<b>Context</b>	<a href="#">qos policer-policies parent-policer-threshold-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**threshold-separation** *number*

<b>Description</b>	Defines the threshold-separation for parent-policer
<b>Context</b>	<a href="#">qos policer-policies parent-policer-threshold-policy name</a> <i>string</i> <a href="#">threshold-separation</a> <i>number</i>
<b>Tree</b>	<a href="#">threshold-separation</a>
<b>Range</b>	3000 to 65536
<b>Default</b>	18000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-policy** *name string*

<b>Description</b>	List of policer policies
<b>Context</b>	<a href="#">qos policer-policies policer-policy</a> <i>name string</i>
<b>Tree</b>	<a href="#">policer-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	64

**name** *string*

<b>Description</b>	The name assigned to the policer policy
<b>Context</b>	<a href="#">qos policer-policies policer-policy</a> <i>name string</i>

<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-policer

<b>Description</b>	Container with options to define aggregate parent-policer parameters
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer</a>
<b>Tree</b>	<a href="#">parent-policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### inputs

<b>Description</b>	Container defining input policers to parent-policer
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer inputs</a>
<b>Tree</b>	<a href="#">inputs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### policer [policer-id](#) *reference*

<b>Description</b>	Enter the policer list instance
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer inputs policer policer-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	32

### policer-id *reference*

<b>Description</b>	Input policer-id
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer inputs policer policer-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i>



<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority-level *number*

<b>Description</b>	Priority level of the input policer. Priority-level 0 corresponds to the lowest priority
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer inputs policer-policer-id</a> <i>reference</i> <a href="#">priority-level number</a>
<b>Tree</b>	<a href="#">priority-level</a>
<b>Range</b>	0 to 5
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-policer-threshold-policy *reference*

<b>Description</b>	Assigns parent-policer-threshold-policy to the parent-policer
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer parent-policer-threshold-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">parent-policer-threshold-policy</a>
<b>Reference</b>	<a href="#">qos policer-policies parent-policer-threshold-policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### rate

<b>Description</b>	Container with options defining parent-policer rate
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer rate</a>
<b>Tree</b>	<a href="#">rate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### adaptation-rule *keyword*

<b>Description</b>	Defines adaptation-rule for peak-rate of the parent-policer
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<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer rate adaptation-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">adaptation-rule</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower The configured values is aligned with closest lower HW value.</li> <li>higher The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **burst-allowance** *number*

<b>Description</b>	Defines burst-allowance for the parent-policer
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer rate burst-allowance</a> <i>number</i>
<b>Tree</b>	<a href="#">burst-allowance</a>
<b>Range</b>	0 to 16383936
<b>Default</b>	40000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peak-rate-kbps** *number*

<b>Description</b>	Defines peak-rate of the parent-policer
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">parent-policer rate peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Range</b>	64 to 800000000
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer** *policer-id number*

<b>Description</b>	The list of policer belonging to the policer-policy
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string policer policer-id number</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	32

**policer-id** *number*

<b>Description</b>	A number to identify given policer within policer-policy
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string policer policer-id number</i>
<b>Range</b>	0 to 31
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**adaptation-rules**

<b>Description</b>	Container defining adaptation rules for individual policer parameters
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string policer policer-id number adaptation-rules</i>
<b>Tree</b>	<a href="#">adaptation-rules</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**committed-burst-size** *keyword*

<b>Description</b>	Adaptation rule for committed-burst-size parameter
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string policer policer-id number adaptation-rules committed-burst-size keyword</i>
<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower</li> </ul>

- The configured values is aligned with closest lower HW value.
- higher
  - The configured value is aligned with the closest higher HW value.

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **committed-rate** *keyword*

<b>Description</b>	Adaptation rule for committed-rate-kbps parameter
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i> <a href="#">adaptation-rules committed-rate</a> <i>keyword</i>
<b>Tree</b>	<a href="#">committed-rate</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>• closest           <ul style="list-style-type: none"> <li>Closest possible HW value is used.</li> </ul> </li> <li>• lower           <ul style="list-style-type: none"> <li>The configured values is aligned with closest lower HW value.</li> </ul> </li> <li>• higher           <ul style="list-style-type: none"> <li>The configured value is aligned with the closest higher HW value.</li> </ul> </li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **excess-burst-size** *keyword*

<b>Description</b>	Adaptation rule for excess-burst-size parameter
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i> <a href="#">adaptation-rules excess-burst-size</a> <i>keyword</i>
<b>Tree</b>	<a href="#">excess-burst-size</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>• closest           <ul style="list-style-type: none"> <li>Closest possible HW value is used.</li> </ul> </li> <li>• lower           <ul style="list-style-type: none"> <li>The configured values is aligned with closest lower HW value.</li> </ul> </li> <li>• higher           <ul style="list-style-type: none"> <li>The configured value is aligned with the closest higher HW value.</li> </ul> </li> </ul>
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **excess-rate** *keyword*

**Description** Adaptation rule for excess-rate-kbs parameter

**Context** [qos policer-policies policer-policy name](#) *string* [policer policer-id](#) *number*  
[adaptation-rules excess-rate](#) *keyword*

**Tree** [excess-rate](#)

**Default** closest

**Options**

- closest  
Closest possible HW value is used.
- lower  
The configured values is aligned with closest lower HW value.
- higher  
The configured value is aligned with the closest higher HW value.

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-burst-size** *keyword*

**Description** Adaptation rule for maximum-burst-size parameter

**Context** [qos policer-policies policer-policy name](#) *string* [policer policer-id](#) *number*  
[adaptation-rules maximum-burst-size](#) *keyword*

**Tree** [maximum-burst-size](#)

**Default** closest

**Options**

- closest  
Closest possible HW value is used.
- lower  
The configured values is aligned with closest lower HW value.
- higher  
The configured value is aligned with the closest higher HW value.

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate** *keyword*

<b>Description</b>	Adaptation rule for peak-rate-kbps parameter
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">adaptation-rules peak-rate</a> <i>keyword</i>
<b>Tree</b>	<a href="#">peak-rate</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower The configured values is aligned with closest lower HW value.</li> <li>higher The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**algorithm-type** *keyword*

<b>Description</b>	Defines the algorithm-type used for the given policer
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">algorithm-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">algorithm-type</a>
<b>Default</b>	trtcm2
<b>Options</b>	<ul style="list-style-type: none"> <li>trtcm1 This enumeration refers to Two-rate Three-color marker as defined by RFC 2698</li> <li>trtcm2 This enumeration refers to Two-rate Three-color marker as defined by RFC 4115</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**committed-burst-size** *number*

<b>Description</b>	Maximum CIR bucket depth in bytes
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">committed-burst-size</a> <i>number</i>

<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Range</b>	64 to 190941
<b>Default</b>	40000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **committed-rate-kbps** *number*

<b>Description</b>	The committed information rate (CIR) of the policer, defined in kilobits (1024 bits) per second
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">committed-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">committed-rate-kbps</a>
<b>Range</b>	0   64 to 800000000
<b>Default</b>	64
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **excess-burst-size** *number*

<b>Description</b>	Maximum EIR bucket depth in bytes. This parameter is ignored if 'algorithm-type' is set to 'trtcm1'
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">excess-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">excess-burst-size</a>
<b>Range</b>	64 to 253952
<b>Default</b>	40000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **excess-rate-kbps** *number*

<b>Description</b>	The excess information rate (EIR) of the policer, defined in kilobits (1024 bits) per second.
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This parameter is ignored if 'algorithm-type' is set to 'trtcm1'

<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">excess-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">excess-rate-kbps</a>
<b>Range</b>	64 to 800000000
<b>Default</b>	64
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-burst-size** *number*

**Description** Maximum PIR bucket depth in bytes.  
This parameter is ignored if 'algorithm-type' is set to 'trtcm2'

<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">maximum-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-burst-size</a>
<b>Range</b>	64 to 253952
<b>Default</b>	40000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**packet-length-adjustment**

**Description** The definition on how packet-length should be adjusted for the policer-algorithm calculation

<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">packet-length-adjustment</a>
<b>Tree</b>	<a href="#">packet-length-adjustment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**add** *number*

<b>Description</b>	Number of bytes to be added to the packet-length for the policer-algorithm calculation
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<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">packet-length-adjustment add</a> <i>number</i>
<b>Tree</b>	<a href="#">add</a>
<b>Range</b>	0 to 32
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**subtract** *number*

<b>Description</b>	Number of bytes to be subtracted from the packet-length for the policer-algorithm calculation
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">packet-length-adjustment subtract</a> <i>number</i>
<b>Tree</b>	<a href="#">subtract</a>
<b>Range</b>	0 to 64
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate-kbps** *number*

<b>Description</b>	The peak information rate (PIR) of the policer, defined in kilobits (1024 bits) per second.  This parameter is ignored if 'algorithm-type' is set to 'trtcm2'
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Range</b>	64 to 800000000
<b>Default</b>	64
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pir-threshold-separation**

<b>Description</b>	Container defining selection of one from pre-defined policer-threshold-separation policies
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">pir-threshold-separation</a>
<b>Tree</b>	<a href="#">pir-threshold-separation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**inplus-separated** *boolean*

<b>Description</b>	Selecting a separate pir-bucket threshold for in-plus profile
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">pir-threshold-separation inplus-separated</a> <i>boolean</i>
<b>Tree</b>	<a href="#">inplus-separated</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics-mode** *keyword*

<b>Description</b>	Defines the number and type of the counters collected for the policer. The modes are mutually exclusive
<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">statistics-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">statistics-mode</a>
<b>Default</b>	extended
<b>Options</b>	<ul style="list-style-type: none"> <li>extended</li> </ul> <p>This statistics-mode counts forwarded packets/octets on per profile basis. The discards are counted as an aggregate</p>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**violate-action** *keyword*

<b>Description</b>	Defines action when policer will evaluate the packet as violating
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<b>Context</b>	<a href="#">qos policer-policies policer-policy name</a> <i>string</i> <a href="#">policer policer-id</a> <i>number</i> <a href="#">violate-action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">violate-action</a>
<b>Default</b>	drop
<b>Options</b>	<ul style="list-style-type: none"> <li>• drop The violating packet will be dropped</li> <li>• mark-exceed The violating packet will be marked as exceed</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### threshold-separation-policies

<b>Description</b>	This container lists pre-defined threshold-separation-policies
<b>Context</b>	<a href="#">qos policer-policies threshold-separation-policies</a>
<b>Tree</b>	<a href="#">threshold-separation-policies</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### threshold-separation-policy *name string*

<b>Description</b>	Lists configuration of pre-defined threshold-separation policy
<b>Context</b>	<a href="#">qos policer-policies threshold-separation-policies threshold-separation-policy</a> <i>name string</i>
<b>Tree</b>	<a href="#">threshold-separation-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### *name string*

<b>Description</b>	System wide pre-defined threshold-separation-policy name
<b>Context</b>	<a href="#">qos policer-policies threshold-separation-policies threshold-separation-policy</a> <i>name string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-profile** [input-profile](#) *keyword*

<b>Description</b>	Profile of the packet
<b>Context</b>	<a href="#">qos policer-policies</a> <a href="#">threshold-separation-policies</a> <a href="#">threshold-separation-policy</a> name <i>string</i> <a href="#">input-profile</a> <a href="#">input-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">input-profile</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**input-profile** *keyword*

<b>Description</b>	The profile the input packet was classified to, based on applicable classification criteria
<b>Context</b>	<a href="#">qos policer-policies</a> <a href="#">threshold-separation-policies</a> <a href="#">threshold-separation-policy</a> name <i>string</i> <a href="#">input-profile</a> <a href="#">input-profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-low Defines packet profile as an input for colour-blind policing at ingress</li> <li>• out-low Defines packet profile as an input for colour-blind policing at ingress</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**threshold-factor** *decimal-number*

<b>Description</b>	Threshold-factor for the policer bucket indicating fraction of mbs
<b>Context</b>	<a href="#">qos policer-policies</a> <a href="#">threshold-separation-policies</a> <a href="#">threshold-separation-policy</a> name <i>string</i> <a href="#">input-profile</a> <a href="#">input-profile</a> <i>keyword</i> <a href="#">threshold-factor</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">threshold-factor</a>

<b>Range</b>	0 to 2
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## policer-templates

<b>Description</b>	Enter the policer-templates context
<b>Context</b>	<a href="#">qos policer-templates</a>
<b>Tree</b>	<a href="#">policer-templates</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## policer-template *name string*

<b>Description</b>	List of policer templates.
<b>Context</b>	<a href="#">qos policer-templates policer-template name string</a>
<b>Tree</b>	<a href="#">policer-template</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## name *string*

<b>Description</b>	The name assigned to the policer template.
<b>Context</b>	<a href="#">qos policer-templates policer-template name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## policer *sequence-id number*

<b>Description</b>	The list of policer instances belonging to the template definition.
<b>Context</b>	<a href="#">qos policer-templates policer-template name string policer sequence-id number</a>
<b>Tree</b>	<a href="#">policer</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	32

### **sequence-id** *number*

<b>Description</b>	A number to indicate the relative evaluation order of the different policers in a template; policers with lower sequence-id numbers are evaluated before policers with higher sequence-id numbers
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **committed-burst-size** *number*

<b>Description</b>	Maximum CIR bucket depth in bytes On 7220-D2/D3 the lower limit is 512 Bytes and higher limit is 268 MB
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">committed-burst-size number</a>
<b>Tree</b>	<a href="#">committed-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **committed-rate-kbps** *number*

<b>Description</b>	The committed information rate (CIR) of the policer, defined in kilobits (1024 bits) per second On 7220-D2/D3 the minimum rate is 8 Kbps
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">committed-rate-kbps number</a>
<b>Tree</b>	<a href="#">committed-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### exceed-action

**Description** Container with options that specify the handling of packets that the policer has determined are exceeding (yellow)

**Context** [qos policer-templates policer-template name](#) *string* [policer sequence-id number](#) [exceed-action](#)

**Tree** [exceed-action](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### drop-probability *keyword*

**Description** Recolor exceeding packets to the specified drop-probability level

**Context** [qos policer-templates policer-template name](#) *string* [policer sequence-id number](#) [exceed-action](#) [drop-probability](#) *keyword*

**Tree** [drop-probability](#)

**Default** medium

**Options**

- low  
Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.
- medium  
Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.
- high  
Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### forwarding-class [fc](#) *reference*

**Description** The list of forwarding classes with traffic to be sent to the policer. If this list is not configured then all subinterface traffic is matched.

<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">forwarding-class fc</a> <i>reference</i>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**fc** *reference*

<b>Description</b>	A forwarding class that has traffic to match to the policer
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">forwarding-class fc</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**forwarding-type** *keyword*

<b>Description</b>	The list of forwarding types, belonging to this forwarding-class, to match to the policer. If none are specified, this implies ALL forwarding types.
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">forwarding-class fc</a> <i>reference</i> <a href="#">forwarding-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">forwarding-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unicast A packet is 'unicast' if the destination address is unicast and it matches an entry in the FIB</li> <li>• unknown-unicast A packet is 'unknown-unicast' if the destination address is unicast but it doesn't match any entry in the FIB and is therefore conventionally flooded</li> <li>• multicast A packet is 'multicast' if the destination address is a multicast address On TD3 systems this includes multicast packets with a known destination/group address and multicast packets with an unknown destination/group address. On TD4 systems this only includes known multicast packets</li> <li>• unknown-multicast Multicast packets with an unknown destination/group address</li> <li>• broadcast A packet is 'broadcast' if the destination address is a broadcast address</li> </ul>



<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	5

### maximum-burst-size *number*

<b>Description</b>	Maximum PIR bucket depth in bytes On 7220-D2/D3 the lower limit is 512 Bytes and higher limit is 268 MB
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">maximum-burst-size</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-burst-size</a>
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### peak-rate-kbps *number*

<b>Description</b>	The peak information rate (PIR) of the policer, defined in kilobits (1024 bits) per second. On 7220-D2/D3 the minimum rate is 8 Kbps
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Units</b>	kbps
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### violate-action

<b>Description</b>	Container with options that specify the handling of packets that the policer has determined are violating (red)
<b>Context</b>	<a href="#">qos policer-templates policer-template name</a> <i>string</i> <a href="#">policer sequence-id number</a> <a href="#">violate-action</a>
<b>Tree</b>	<a href="#">violate-action</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## drop

**Description** Violating packets should be dropped immediately

**Context** [qos policer-templates policer-template name string policer sequence-id number violate-action drop](#)

**Tree** [drop](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## drop-probability *keyword*

**Description** Recolor violating packets to the specified drop-probability level

**Context** [qos policer-templates policer-template name string policer sequence-id number violate-action drop-probability keyword](#)

**Tree** [drop-probability](#)

**Default** high

**Options**

- low  
Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.
- medium  
Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.
- high  
Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics-mode *keyword*

**Description** The statistics mode of all policers belonging to this template

**Context** [qos policer-templates policer-template name string statistics-mode keyword](#)

**Tree** [statistics-mode](#)

<b>Default</b>	violating-focus
<b>Options</b>	<ul style="list-style-type: none"> <li>violating-focus In this statistics mode only 4 counters are provided: accepted-packets, accepted-octets, violating-packets, violating-octets</li> <li>forwarding-focus In this statistics mode only 4 counters are provided: committed-packets, committed-octets, exceeding-packets, exceeding-octets</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### preserve-dscp *boolean*

<b>Description</b>	When forwarding an untunneled IP packet or decapsulating an IP-in-IP packet, preserve the received DSCP and use it in the transmitted packet. This should not be enabled unless all IP packets have been classified by a multi-field classifier policy
<b>Context</b>	<a href="#">qos preserve-dscp boolean</a>
<b>Tree</b>	<a href="#">preserve-dscp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### queues

<b>Description</b>	Enclosing container for the list of user-defined queue names
<b>Context</b>	<a href="#">qos queues</a>
<b>Tree</b>	<a href="#">queues</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pfc-queue [pfc-queue-name string](#)

<b>Description</b>	List of pfc-queues
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<b>Context</b>	<a href="#">qos queues pfc-queue pfc-queue-name</a> <i>string</i>
<b>Tree</b>	<a href="#">pfc-queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **pfc-queue-name** *string*

<b>Description</b>	User-defined name of the pfc-queue
<b>Context</b>	<a href="#">qos queues pfc-queue pfc-queue-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **queue-index** *number*

<b>Description</b>	The queue index (offset) of the pfc-queue
<b>Context</b>	<a href="#">qos queues pfc-queue pfc-queue-name</a> <i>string</i> <a href="#">queue-index</a> <i>number</i>
<b>Tree</b>	<a href="#">queue-index</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **queue name** *string*

<b>Description</b>	List of user-defined queues
<b>Context</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name string**

<b>Description</b>	User-defined name of the queue  The following queue names are the system-reserved default queue names on 7250 IXR systems: unicast-0 unicast-1 unicast-2 unicast-3 unicast-4 unicast-5 unicast-6 unicast-7  The following queue names are the system-reserved default queue names on FPcx chipset based systems: queue-0 queue-1 queue-2 queue-3 queue-4 queue-5 queue-6 queue-7 queue-8 queue-9 queue-10 queue-11
<b>Context</b>	<a href="#">qos queues queue name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-index number**

<b>Description</b>	The queue index (offset) of the queue within the set of queues allocated to a given interface or subinterface
<b>Context</b>	<a href="#">qos queues queue name string queue-index number</a>
<b>Tree</b>	<a href="#">queue-index</a>
<b>Range</b>	0 to 11
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**queue-depth-sampling**

<b>Description</b>	System level configuration for queue-depth sampling
<b>Context</b>	<a href="#">qos queues queue-depth-sampling</a>
<b>Tree</b>	<a href="#">queue-depth-sampling</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H4

**admin-state** *keyword*

<b>Description</b>	Set to enable to activate queue-depth sampling on all ports
<b>Context</b>	<a href="#">qos queues queue-depth-sampling admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H4

**polling-interval** *number*

<b>Description</b>	The interval of time between each sample of queue depth
<b>Context</b>	<a href="#">qos queues queue-depth-sampling polling-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">polling-interval</a>
<b>Range</b>	30 to 1000
<b>Default</b>	1000
<b>Units</b>	milliseconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-H4

**resource-management**

<b>Description</b>	Enter the resource-management context
<b>Context</b>	<a href="#">qos resource-management</a>
<b>Tree</b>	<a href="#">resource-management</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**drop-zones**

<b>Description</b>	Defines drop-zones per shared-resource on per resource-priority and per packet-type basis
<b>Context</b>	<a href="#">qos resource-management drop-zones</a>

<b>Tree</b>	<a href="#">drop-zones</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-priority [resource-priority number](#)**

<b>Description</b>	Enter the multicast-priority list instance
<b>Context</b>	<a href="#">qos resource-management drop-zones multicast-priority resource-priority number</a>
<b>Tree</b>	<a href="#">multicast-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **resource-priority number**

<b>Description</b>	Resource-priority for multicast and broadcast packets
<b>Context</b>	<a href="#">qos resource-management drop-zones multicast-priority resource-priority number</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **buffer-segment-drop-zone number**

<b>Description</b>	Defines drop-zone for buffer-segments at which packets with a given resource-priority will be discarded
<b>Context</b>	<a href="#">qos resource-management drop-zones multicast-priority resource-priority number buffer-segment-drop-zone number</a>
<b>Tree</b>	<a href="#">buffer-segment-drop-zone</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **header-buffer-drop-zone number**

<b>Description</b>	Defines drop-zone for header-buffer at which packets with a given resource-priority will be discarded
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<b>Context</b>	<a href="#">qos resource-management drop-zones multicast-priority resource-priority number header-buffer-drop-zone number</a>
<b>Tree</b>	<a href="#">header-buffer-drop-zone</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **packet-id-drop-zone** *number*

<b>Description</b>	Defines drop-zone for packet-id at which packets with a given resource-priority will be discarded
<b>Context</b>	<a href="#">qos resource-management drop-zones multicast-priority resource-priority number packet-id-drop-zone number</a>
<b>Tree</b>	<a href="#">packet-id-drop-zone</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unicast-priority** [resource-priority](#) *number*

<b>Description</b>	Enter the unicast-priority list instance
<b>Context</b>	<a href="#">qos resource-management drop-zones unicast-priority resource-priority number</a>
<b>Tree</b>	<a href="#">unicast-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **resource-priority** *number*

<b>Description</b>	Resource-priority for unicast packets
<b>Context</b>	<a href="#">qos resource-management drop-zones unicast-priority resource-priority number</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



**buffer-segment-drop-zone** *number*

<b>Description</b>	Defines drop-zone for buffer-segments at which packets with a given resource-priority will be discarded
<b>Context</b>	<a href="#">qos resource-management drop-zones unicast-priority resource-priority number</a> <a href="#">buffer-segment-drop-zone number</a>
<b>Tree</b>	<a href="#">buffer-segment-drop-zone</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**header-buffer-drop-zone** *number*

<b>Description</b>	Defines drop-zone for header-buffer at which packets with a given resource-priority will be discarded
<b>Context</b>	<a href="#">qos resource-management drop-zones unicast-priority resource-priority number</a> <a href="#">header-buffer-drop-zone number</a>
<b>Tree</b>	<a href="#">header-buffer-drop-zone</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**packet-id-drop-zone** *number*

<b>Description</b>	Defines drop-zone for packet-id at which packets with a given resource-priority will be discarded
<b>Context</b>	<a href="#">qos resource-management drop-zones unicast-priority resource-priority number</a> <a href="#">packet-id-drop-zone number</a>
<b>Tree</b>	<a href="#">packet-id-drop-zone</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class-resource-priority**

<b>Description</b>	Defines priority per forwarding-class and per profile to be used for access to shared chipset resources
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority</a>

<b>Tree</b>	<a href="#">forwarding-class-resource-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class [name reference](#)

<b>Description</b>	User defined forwarding class
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name reference</a>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name reference</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile [profile-name keyword](#)

<b>Description</b>	User defined forwarding class
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name reference profile profile-name keyword</a>
<b>Tree</b>	<a href="#">profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile-name *keyword*

<b>Description</b>	Enter the profile-name context
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name reference profile profile-name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>in</li> </ul>

- Defines packet profile as an input for colour-aware policing at ingress
- out
- Defines packet profile as an input for colour-aware policing at ingress
- exceed
- Defines packet profile as an input for colour-aware policing at ingress
- in-plus
- Defines packet profile as an input for colour-aware policing at ingress
- in-low
- Defines packet profile as an input for colour-blind policing at ingress
- out-low
- Defines packet profile as an input for colour-blind policing at ingress

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-resource-priority** *number*

<b>Description</b>	Defines priority multicast and broadcast packets will be assigned to shared chipset resources for a specific forwarding-class and profile combination
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name</a> <i>reference</i> <a href="#">profile profile-name</a> <i>keyword</i> <b>multicast-resource-priority</b> <i>number</i>
<b>Tree</b>	<a href="#">multicast-resource-priority</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unicast-resource-priority** *number*

<b>Description</b>	Defines priority unicast packets will be assigned to shared chipset resources for a specific forwarding-class and profile combination
<b>Context</b>	<a href="#">qos resource-management forwarding-class-resource-priority forwarding-class name</a> <i>reference</i> <a href="#">profile profile-name</a> <i>keyword</i> <b>unicast-resource-priority</b> <i>number</i>
<b>Tree</b>	<a href="#">unicast-resource-priority</a>
<b>Range</b>	0 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## resource-utilization-thresholds

<b>Description</b>	Defines thresholds monitoring used resources which divide individual shared chipset resources into 4 utilization-zones
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds</a>
<b>Tree</b>	<a href="#">resource-utilization-thresholds</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## threshold *index number*

<b>Description</b>	Enter the threshold list instance
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number</a>
<b>Tree</b>	<a href="#">threshold</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## *index number*

<b>Description</b>	Threshold index
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number</a>
<b>Range</b>	1 to 3
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## buffer-segment

<b>Description</b>	Utilization thresholds for buffer segments
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number buffer-segment</a>
<b>Tree</b>	<a href="#">buffer-segment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**falling-threshold-value** *decimal-number*

<b>Description</b>	The falling-threshold-value defining the transition from lower-congestion zone to higher-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number buffer-segment falling-threshold-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">falling-threshold-value</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**rising-threshold-value** *decimal-number*

<b>Description</b>	The rising-threshold-value defining the transition from higher-congestion zone to lower-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number buffer-segment rising-threshold-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">rising-threshold-value</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**header-buffer**

<b>Description</b>	Utilization thresholds for packet header buffers
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number header-buffer</a>
<b>Tree</b>	<a href="#">header-buffer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**falling-threshold-value** *decimal-number*

<b>Description</b>	The falling-threshold-value defining the transition from lower-congestion zone to higher-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number header-buffer falling-threshold-value</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">falling-threshold-value</a>

<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### rising-threshold-value *decimal-number*

<b>Description</b>	The rising-threshold-value defining the transition from higher-congestion zone to lower-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number header-buffer rising-threshold-value decimal-number</a>
<b>Tree</b>	<a href="#">rising-threshold-value</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### packet-id

<b>Description</b>	Utilization thresholds for packet re-ordering contexts
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number packet-id</a>
<b>Tree</b>	<a href="#">packet-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### falling-threshold-value *decimal-number*

<b>Description</b>	The falling-threshold-value defining the transition from lower-congestion zone to higher-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number packet-id falling-threshold-value decimal-number</a>
<b>Tree</b>	<a href="#">falling-threshold-value</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**rising-threshold-value** *decimal-number*

<b>Description</b>	The rising-threshold-value defining the transition from higher-congestion zone to lower-congestion zone
<b>Context</b>	<a href="#">qos resource-management resource-utilization-thresholds threshold index number packet-id rising-threshold-value decimal-number</a>
<b>Tree</b>	<a href="#">rising-threshold-value</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**rewrite-rules**

<b>Description</b>	Enter the rewrite-rules context
<b>Context</b>	<a href="#">qos rewrite-rules</a>
<b>Tree</b>	<a href="#">rewrite-rules</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dot1p-policy** *name string*

<b>Description</b>	Enter the dot1p-policy list instance
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string</a>
<b>Tree</b>	<a href="#">dot1p-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	User-configured name for an 802.1p priority code point rewrite policy
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### map forwarding-class *reference*

**Description** Enter the map list instance

**Context** [qos rewrite-rules dot1p-policy name string map forwarding-class reference](#)

**Tree** [map](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *reference*

**Description** The forwarding class

**Context** [qos rewrite-rules dot1p-policy name string map forwarding-class reference](#)

**Reference** [qos forwarding-classes forwarding-class name string](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dot1p *number*

**Description** The dot1p marking to be used for all packets associated with the FC, except those with a drop-probability-specific or profile-specific override

**Context** [qos rewrite-rules dot1p-policy name string map forwarding-class reference dot1p number](#)

**Tree** [dot1p](#)

**Range** 0 to 7

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### drop-probability [drop-probability](#) *keyword*

**Description** Enter the drop-probability list instance



<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference drop-probability drop-probability keyword</a>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### drop-probability *keyword*

<b>Description</b>	A drop probability level within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference drop-probability drop-probability keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### dot1p *number*

<b>Description</b>	The dot1p marking to be used for this specific drop-probability
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference drop-probability drop-probability keyword dot1p number</a>
<b>Tree</b>	<a href="#">dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **inner-de** *boolean*

<b>Description</b>	Re-marking inner-vlan discard-eligibility bit for the respective forwarding-class
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">inner-de</a> <i>boolean</i>
<b>Tree</b>	<a href="#">inner-de</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inner-dot1p** *number*

<b>Description</b>	The inner-dot1p marking to be used for all packets associated with the FC, except those with a profile-specific override
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">inner-dot1p</a> <i>number</i>
<b>Tree</b>	<a href="#">inner-dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **outer-de** *boolean*

<b>Description</b>	Re-marking outer-vlan discard-eligibility bit for the respective forwarding-class
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">outer-de</a> <i>boolean</i>
<b>Tree</b>	<a href="#">outer-de</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**outer-dot1p** *number*

<b>Description</b>	The outer-dot1p marking to be used for all packets associated with the FC, except those with a profile-specific override
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">outer-dot1p</a> <i>number</i>
<b>Tree</b>	<a href="#">outer-dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** [profile](#) *keyword*

<b>Description</b>	Enter the profile list instance
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">profile profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	A packet profile within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">profile profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in</a> The second level priority profile</li> <li>• <a href="#">out</a> The lowest level priority profile</li> <li>• <a href="#">exceed</a> The third level priority profile</li> <li>• <a href="#">in-plus</a> The highest priority profile</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**inner-de** *boolean*

<b>Description</b>	Re-marking inner-vlan discard-eligibility bit for this specific forwarding-class and profile
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference profile profile keyword inner-de boolean</a>
<b>Tree</b>	<a href="#">inner-de</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**inner-dot1p** *number*

<b>Description</b>	The inner-dot1p marking to be used for this specific forwarding-class and profile
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference profile profile keyword inner-dot1p number</a>
<b>Tree</b>	<a href="#">inner-dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**outer-de** *boolean*

<b>Description</b>	Re-marking outer-vlan discard-eligibility bit for this specific forwarding-class and profile
<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name string map forwarding-class reference profile profile keyword outer-de boolean</a>
<b>Tree</b>	<a href="#">outer-de</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**outer-dot1p** *number*

<b>Description</b>	The outer-dot1p marking to be used for this specific forwarding-class and profile
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<b>Context</b>	<a href="#">qos rewrite-rules dot1p-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">profile profile</a> <i>keyword</i> <a href="#">outer-dot1p</a> <i>number</i>
<b>Tree</b>	<a href="#">outer-dot1p</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp-policy** *name string*

<b>Description</b>	Enter the dscp-policy list instance
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>
<b>Tree</b>	<a href="#">dscp-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	User-configured name for a DSCP rewrite policy
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **map forwarding-class** *reference*

<b>Description</b>	Enter the map list instance
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i>
<b>Tree</b>	<a href="#">map</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**forwarding-class** *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**drop-probability** [drop-probability](#) *keyword*

<b>Description</b>	Enter the drop-probability list instance
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">drop-probability drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**drop-probability** *keyword*

<b>Description</b>	A drop probability level within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i> <a href="#">drop-probability drop-probability</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>• medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> <li>• high Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.</li> </ul>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **dscp** (*number* | *keyword*)

**Description** The DSCP marking to be used for this specific drop-probability

**Context** [qos rewrite-rules dscp-policy name](#) *string* [map forwarding-class reference](#) [drop-probability drop-probability](#) *keyword* **dscp** (*number* | *keyword*)

**Tree** [dscp](#)

**Range** 0 to 63

**Options**

- CS0
- LE
- CS1
- AF11
- AF12
- AF13
- CS2
- AF21
- AF22
- AF23
- CS3
- AF31
- AF32
- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **dscp** (*number* | *keyword*)

<b>Description</b>	The DSCP marking to be used for all packets associated with the FC, except those with a drop-probability-specific or profile-specific override
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string map forwarding-class reference</i> <a href="#">dscp</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**profile** *profile keyword*

<b>Description</b>	Enter the profile list instance
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string map forwarding-class reference</i> <a href="#">profile profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**profile** *keyword*

<b>Description</b>	A packet profile within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string map forwarding-class reference</i> <a href="#">profile profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">in</a> The second level priority profile</li> <li>• <a href="#">out</a> The lowest level priority profile</li> <li>• <a href="#">exceed</a> The third level priority profile</li> <li>• <a href="#">in-plus</a> The highest priority profile</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp** (*number | keyword*)

<b>Description</b>	The DSCP marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string map forwarding-class reference</i> <a href="#">profile profile</a> <i>keyword dscp (number   keyword)</i>
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">CS0</a></li> <li>• <a href="#">LE</a></li> <li>• <a href="#">CS1</a></li> <li>• <a href="#">AF11</a></li> </ul>

- AF12
- AF13
- CS2
- AF21
- AF22
- AF23
- CS3
- AF31
- AF32
- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ip-rewrite-policy** *name string*

<b>Description</b>	Enter the ip-rewrite-policy list instance
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name string</a>
<b>Tree</b>	<a href="#">ip-rewrite-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	User defined ip-rewrite-policy name
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name string</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## exceed

<b>Description</b>	Enter the exceed context
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name string exceed</a>
<b>Tree</b>	<a href="#">exceed</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dscp (*number* | *keyword*)

<b>Description</b>	The DSCP marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name string exceed dscp (<i>number</i>   <i>keyword</i>)</a>
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> </ul>

- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**precedence number****Description**

The ip-precedence marking to be used for this specific profile

**Context**[qos rewrite-rules ip-rewrite-policy name](#) *string exceed precedence number***Tree**[precedence](#)**Range**

0 to 7

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in****Description**

Enter the in context

**Context**[qos rewrite-rules ip-rewrite-policy name](#) *string in***Tree**[in](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp** (*number | keyword*)

<b>Description</b>	The DSCP marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string in dscp</i> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"><li>• CS0</li><li>• LE</li><li>• CS1</li><li>• AF11</li><li>• AF12</li><li>• AF13</li><li>• CS2</li><li>• AF21</li><li>• AF22</li><li>• AF23</li><li>• CS3</li><li>• AF31</li><li>• AF32</li><li>• AF33</li><li>• CS4</li><li>• AF41</li><li>• AF42</li><li>• AF43</li><li>• CS5</li><li>• EF</li><li>• CS6</li><li>• CS7</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**precedence *number***

<b>Description</b>	The ip-precedence marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i> <a href="#">precedence number</a>
<b>Tree</b>	<a href="#">precedence</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-plus**

<b>Description</b>	Enter the in-plus context
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i> <a href="#">in-plus</a>
<b>Tree</b>	<a href="#">in-plus</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dscp (*number* | *keyword*)**

<b>Description</b>	The DSCP marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i> <a href="#">in-plus</a> <a href="#">dscp</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> </ul>

- AF22
- AF23
- CS3
- AF31
- AF32
- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**precedence number****Description**

The ip-precedence marking to be used for this specific profile

**Context**[qos rewrite-rules ip-rewrite-policy name string in-plus precedence number](#)**Tree**[precedence](#)**Range**

0 to 7

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out****Description**

Enter the out context

**Context**[qos rewrite-rules ip-rewrite-policy name string out](#)**Tree**[out](#)**Configurable**

True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dscp** (*number | keyword*)

<b>Description</b>	The DSCP marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string out dscp</i> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250



IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **precedence** *number*

<b>Description</b>	The ip-precedence marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules ip-rewrite-policy name</a> <i>string</i> <a href="#">out precedence</a> <i>number</i>
<b>Tree</b>	<a href="#">precedence</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-traffic-class-policy** *name string*

<b>Description</b>	Enter the mpls-traffic-class-policy list instance
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i>
<b>Tree</b>	<a href="#">mpls-traffic-class-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	User-configured name for an MPLS traffic-class rewrite policy
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **map forwarding-class** *reference*

<b>Description</b>	Enter the map list instance
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class</a> <i>reference</i>

<b>Tree</b>	<a href="#">map</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### drop-probability [drop-probability](#) *keyword*

<b>Description</b>	Enter the drop-probability list instance
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference</a> <a href="#">drop-probability drop-probability</a> <i>keyword</i>
<b>Tree</b>	<a href="#">drop-probability</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### drop-probability *keyword*

<b>Description</b>	A drop probability level within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference</a> <a href="#">drop-probability drop-probability</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>low Traffic that should be dropped last when there is congestion. Internally this is traffic that is colored green.</li> <li>medium Traffic that should be dropped before green traffic but after red traffic when there is congestion. Internally this is traffic that is colored yellow.</li> </ul>

- high  
Traffic that should be dropped first when there is congestion. Internally this is traffic that is colored red.

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### traffic-class *number*

<b>Description</b>	The MPLS traffic class marking to be used for this specific drop-probability
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference drop-probability drop-probability</a> <i>keyword</i> <a href="#">traffic-class number</a>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### profile [profile](#) *keyword*

<b>Description</b>	Enter the profile list instance
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference profile profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile *keyword*

<b>Description</b>	A packet profile within the FC for which a different remarking is desired
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference profile profile</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in The second level priority profile</li> <li>• out</li> </ul>

	The lowest level priority profile
	<ul style="list-style-type: none"> <li>• exceed</li> </ul>
	The third level priority profile
	<ul style="list-style-type: none"> <li>• in-plus</li> </ul>
	The highest priority profile
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **traffic-class** *number*

<b>Description</b>	The MPLS traffic class marking to be used for this specific profile
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference profile profile</a> <i>keyword</i> <a href="#">traffic-class number</a>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **traffic-class** *number*

<b>Description</b>	The MPLS traffic class marking to be used for all packets associated with the FC, except those with a drop-probability-specific or profile-specific override
<b>Context</b>	<a href="#">qos rewrite-rules mpls-traffic-class-policy name</a> <i>string</i> <a href="#">map forwarding-class reference traffic-class number</a>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **vxlan-outer-header-dscp-policy** *reference*

<b>Description</b>	Reference to the name of a DSCP rewrite policy that applies to the outer IP header of originating VXLAN packets
<b>Context</b>	<a href="#">qos rewrite-rules vxlan-outer-header-dscp-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">vxlan-outer-header-dscp-policy</a>
<b>Reference</b>	<a href="#">qos rewrite-rules dscp-policy name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## scheduler-policies

<b>Description</b>	Container for the list of configured scheduler policies
<b>Context</b>	<a href="#">qos scheduler-policies</a>
<b>Tree</b>	<a href="#">scheduler-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue-scheduling-policy *name string*

<b>Description</b>	Scheduling-policy defining scheduling at queue level
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name string</a>
<b>Tree</b>	<a href="#">queue-scheduling-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	64

## name *string*

<b>Description</b>	Name for the queue-scheduling-policy
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue *queue-name reference*

<b>Description</b>	The queue parameters that is the input to the scheduler
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<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **queue-name** *reference*

<b>Description</b>	The queue name
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduling**

<b>Description</b>	Definition of scheduling related for the queue
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i> <a href="#">scheduling</a>
<b>Tree</b>	<a href="#">scheduling</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **packet-length-adjustment**

<b>Description</b>	The definition on how packet-length should be adjusted for the scheduling-algorithm calculation
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i> <a href="#">scheduling packet-length-adjustment</a>
<b>Tree</b>	<a href="#">packet-length-adjustment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **add** *number*

<b>Description</b>	Number of bytes to be added to the packet-length for the scheduling-algorithm calculation
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<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i> <a href="#">scheduling packet-length-adjustment add</a> <i>number</i>
<b>Tree</b>	<a href="#">add</a>
<b>Range</b>	0 to 32
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduling-class** *number*

<b>Description</b>	Scheduling-class of the queue
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i> <a href="#">scheduling scheduling-class</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduling-class</a>
<b>Range</b>	0   2   4   6
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **weight** *number*

<b>Description</b>	The scheduling weight of the given queue
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">queue queue-name</a> <i>reference</i> <a href="#">scheduling weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Range</b>	1 to 127
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduler** [sequence-id](#) *number*

<b>Description</b>	Scheduling options for output traffic
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduler</a>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-id** *number*

<b>Description</b>	Identifier of the scheduler
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i>
<b>Range</b>	0 to 16
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **burst-allowance** *number*

<b>Description</b>	Burst allowance for the scheduler in bytes
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">burst-allowance</a> <i>number</i>
<b>Tree</b>	<a href="#">burst-allowance</a>
<b>Default</b>	9000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inputs**

<b>Description</b>	List of scheduler inputs
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a>
<b>Tree</b>	<a href="#">inputs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inputs** *keyword*

<b>Description</b>	This options defines that all queues defined in this queue-scheduling-policy are input to this tier-0 scheduler or all tier-0 schedulers are input to tier-1 scheduler
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<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a> <a href="#">inputs</a> <i>keyword</i>
<b>Tree</b>	<a href="#">inputs</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">auto-input</a></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### queue *reference*

<b>Description</b>	List of queues which are input to the scheduler
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a> <a href="#">queue</a> <i>reference</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### rate

<b>Description</b>	Defines the scheduler rate
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate</a>
<b>Tree</b>	<a href="#">rate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### peak-rate-kbps *number*

<b>Description</b>	Scheduler peak-rate in kilobits-per-second
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate</a> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate-percentage** *number*

<b>Description</b>	Scheduler peak-rate as the percentage of the output rate
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate peak-rate-percentage</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-percentage</a>
<b>Range</b>	1 to 100
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pir-adaptation-rule** *keyword*

<b>Description</b>	Defines how the user-configured values will be adjusted to available hardware values
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate pir-adaptation-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pir-adaptation-rule</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>closest Closest possible HW value is used.</li> <li>lower The configured values is aligned with closest lower HW value.</li> <li>higher The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**threshold-separation** *number*

<b>Description</b>	Separation between thresholds in scheduling bucket in bytes
<b>Context</b>	<a href="#">qos scheduler-policies queue-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">threshold-separation</a> <i>number</i>
<b>Tree</b>	<a href="#">threshold-separation</a>
<b>Default</b>	28672
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tier** *number*

**Description** Scheduling-hierarchy level

**Context** [qos scheduler-policies queue-scheduling-policy name](#) *string* [scheduler sequence-id](#) *number* **tier** *number*

**Tree** [tier](#)

**Range** 0 to 1

**Default** 0

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sched-class-scheduling-policy** *name string*

**Description** Scheduling-policy defining scheduling at scheduling-class level

**Context** [qos scheduler-policies sched-class-scheduling-policy name](#) *string*

**Tree** [sched-class-scheduling-policy](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 64

### **name** *string*

**Description** Name for the sched-class-scheduling-policy

**Context** [qos scheduler-policies sched-class-scheduling-policy name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduler** [sequence-id](#) *number*

**Description** Scheduling options for output traffic

**Context** [qos scheduler-policies sched-class-scheduling-policy name](#) *string* [scheduler sequence-id](#) *number*

**Tree** [scheduler](#)

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sequence-id** *number*

<b>Description</b>	Identifier of the scheduler
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i>
<b>Range</b>	0 to 8
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **burst-allowance** *number*

<b>Description</b>	Burst allowance for the scheduler in bytes
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">burst-allowance</a> <i>number</i>
<b>Tree</b>	<a href="#">burst-allowance</a>
<b>Default</b>	9000
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inputs**

<b>Description</b>	List of scheduler inputs
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a>
<b>Tree</b>	<a href="#">inputs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **inputs** *keyword*

<b>Description</b>	This options defines that all scheduling-classes are input to this tier-0 scheduler or all tier-0 schedulers are input to tier-1 scheduler
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<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a> <a href="#">inputs</a> <i>keyword</i>
<b>Tree</b>	<a href="#">inputs</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">auto-input</a></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduling-class** *number*

<b>Description</b>	List of scheduling-classes which are input to this tier-0 scheduler
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">inputs</a> <a href="#">scheduling-class</a> <i>number</i>
<b>Tree</b>	<a href="#">scheduling-class</a>
<b>Range</b>	0   2   4   6
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rate**

<b>Description</b>	Defines the scheduler rate
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate</a>
<b>Tree</b>	<a href="#">rate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peak-rate-kbps** *number*

<b>Description</b>	Scheduler peak-rate in kilobits-per-second
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate</a> <a href="#">peak-rate-kbps</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-kbps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**peak-rate-percentage** *number*

<b>Description</b>	Scheduler peak-rate as the percentage of the output rate
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate peak-rate-percentage</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-percentage</a>
<b>Range</b>	1 to 100
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**pir-adaptation-rule** *keyword*

<b>Description</b>	Defines how the user-configured values will be adjusted to available hardware values
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">rate pir-adaptation-rule</a> <i>keyword</i>
<b>Tree</b>	<a href="#">pir-adaptation-rule</a>
<b>Default</b>	closest
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>closest</b> Closest possible HW value is used.</li> <li>• <b>lower</b> The configured values is aligned with closest lower HW value.</li> <li>• <b>higher</b> The configured value is aligned with the closest higher HW value.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**threshold-separation** *number*

<b>Description</b>	Separation between thresholds in scheduling bucket in bytes
<b>Context</b>	<a href="#">qos scheduler-policies sched-class-scheduling-policy name</a> <i>string</i> <a href="#">scheduler sequence-id</a> <i>number</i> <a href="#">threshold-separation</a> <i>number</i>
<b>Tree</b>	<a href="#">threshold-separation</a>
<b>Default</b>	28672
<b>Configurable</b>	True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tier number**

**Description** Scheduling-hierarchy level

**Context** [qos scheduler-policies sched-class-scheduling-policy name](#) *string* [scheduler sequence-id](#) *number* [tier number](#)

**Tree** [tier](#)

**Range** 0 to 1

**Default** 0

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **scheduler-policy name string**

**Description** List of scheduler policies. A scheduler policy is a set of schedulers that are to be applied together. Each scheduler within a scheduler policy takes an input, and outputs it according to a scheduling discipline that is specified within it

**Context** [qos scheduler-policies scheduler-policy name](#) *string*

**Tree** [scheduler-policy](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **name string**

**Description** Name for the scheduler policy

**Context** [qos scheduler-policies scheduler-policy name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**scheduler** *sequence number*

<b>Description</b>	List of defined QoS traffic schedulers
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a>
<b>Tree</b>	<a href="#">scheduler</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**sequence number**

<b>Description</b>	Sequence number for the scheduler within the scheduler policy. Schedulers are processed from lowest sequence to highest
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a>
<b>Range</b>	0 to 1
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**input id** *string*

<b>Description</b>	List of input sources for the scheduler
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <a href="#">input id string</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**id** *string*

<b>Description</b>	User-defined identifier for the scheduler input
--------------------	---



<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>input id string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **input-type** *keyword*

<b>Description</b>	Enter the input-type context
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>input id string</i> <a href="#">input-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">input-type</a>
<b>Default</b>	queue
<b>Options</b>	<ul style="list-style-type: none"> <li>• queue</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **peak-rate-percent** *number*

<b>Description</b>	The maximum percentage of port bandwidth that is available to the traffic in this queue during the PIR scheduling loop. The default is 100
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>input id string</i> <a href="#">peak-rate-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">peak-rate-percent</a>
<b>Range</b>	1 to 100
<b>Default</b>	100
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**queue-name** *reference*

<b>Description</b>	The queue name
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>input id</i> <i>string</i> <a href="#">queue-name</a> <i>reference</i>
<b>Tree</b>	<a href="#">queue-name</a>
<b>Reference</b>	<a href="#">qos queues queue name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**weight** *number*

<b>Description</b>	For weighted round-robin schedulers, this leaf indicates the weight of the corresponding input
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>input id</i> <i>string</i> <a href="#">weight</a> <i>number</i>
<b>Tree</b>	<a href="#">weight</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**priority** *keyword*

<b>Description</b>	Priority of the scheduler within the scheduler policy
<b>Context</b>	<a href="#">qos scheduler-policies scheduler-policy name</a> <i>string</i> <a href="#">scheduler sequence number</a> <i>priority</i> <i>keyword</i>
<b>Tree</b>	<a href="#">priority</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>strict</li> </ul> <p>This scheduler term is considered as a strict priority term - such that packets that arrive in the queue are immediately serviced</p>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### scheduling-priority-mapping-table

<b>Description</b>	This table maps individual scheduling-classes into scheduling-priority. This table is global for the whole system
<b>Context</b>	<a href="#">qos scheduler-policies scheduling-priority-mapping-table</a>
<b>Tree</b>	<a href="#">scheduling-priority-mapping-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### scheduling-class [index number](#)

<b>Description</b>	List of scheduling-classes
<b>Context</b>	<a href="#">qos scheduler-policies scheduling-priority-mapping-table scheduling-class index number</a>
<b>Tree</b>	<a href="#">scheduling-class</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### [index number](#)

<b>Description</b>	Scheduling-class index
<b>Context</b>	<a href="#">qos scheduler-policies scheduling-priority-mapping-table scheduling-class index number</a>
<b>Range</b>	0   2   4   6
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### scheduling-priority [number](#)

<b>Description</b>	Scheduling-priority assigned to the scheduling-class
<b>Context</b>	<a href="#">qos scheduler-policies scheduling-priority-mapping-table scheduling-class index number scheduling-priority number</a>
<b>Tree</b>	<a href="#">scheduling-priority</a>
<b>Range</b>	0 to 2

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### system-generated-traffic

<b>Description</b>	Defines mapping of dscp values into forwarding-class and profile for system generated traffic
<b>Context</b>	<a href="#">qos system-generated-traffic</a>
<b>Tree</b>	<a href="#">system-generated-traffic</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### dscp value (*number* | *keyword*)

<b>Description</b>	Enter the dscp list instance
<b>Context</b>	<a href="#">qos system-generated-traffic dscp value (<i>number</i>   <i>keyword</i>)</a>
<b>Tree</b>	<a href="#">dscp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### value (*number* | *keyword*)

<b>Description</b>	Enter the value context
<b>Context</b>	<a href="#">qos system-generated-traffic dscp value (<i>number</i>   <i>keyword</i>)</a>
<b>Range</b>	0 to 63
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> </ul>

- AF31
- AF32
- AF33
- CS4
- AF41
- AF42
- AF43
- CS5
- EF
- CS6
- CS7

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### forwarding-class *reference*

<b>Description</b>	The forwarding class
<b>Context</b>	<a href="#">qos system-generated-traffic dscp value (number   keyword) forwarding-class reference</a>
<b>Tree</b>	<a href="#">forwarding-class</a>
<b>Reference</b>	<a href="#">qos forwarding-classes forwarding-class name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### profile *keyword*

<b>Description</b>	The profile to which the DSCP value is mapped
<b>Context</b>	<a href="#">qos system-generated-traffic dscp value (number   keyword) profile keyword</a>
<b>Tree</b>	<a href="#">profile</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• in Defines packet profile as an input for colour-aware policing at ingress</li> <li>• out Defines packet profile as an input for colour-aware policing at ingress</li> <li>• exceed Defines packet profile as an input for colour-aware policing at ingress</li> <li>• in-plus</li> </ul>

Defines packet profile as an input for colour-aware policing at ingress

- in-low

Defines packet profile as an input for colour-blind policing at ingress

- out-low

Defines packet profile as an input for colour-blind policing at ingress

**Configurable**

False

**Platforms**

7730 SXR-1d-32D, 7730 SXR-1x-44S

## 10 routing-policy

```

routing-policy
+ as-path-set name string
+ expression string
+ community-set name string
+ match-set-options keyword
+ member (identityref | bgp-std-community-type | bgp-large-community-type | string | string
| string | string | string | string | string | string | string | string | bgp-large-community-
regex-type | bgp-std-community-regex-type)
+ policy name string
+ default-action
+ bgp
+ as-path
+ prepend
+ as-number (number | keyword)
+ repeat-n number
+ remove boolean
+ replace number
+ communities
+ add reference
+ remove reference
+ replace reference
+ label-allocation
+ prefix-sid
+ reuse-igp boolean
+ local-preference
+ set number
+ med
+ set (number | keyword)
+ next-hop
+ set (ipv4-address | ipv6-address | keyword)
+ next-hop-resolution
+ set-tag-set reference
+ origin
+ set keyword
+ internal-tags
+ set-tag-set reference
+ policy-result keyword
+ route-preference
+ set number
+ statement name string
+ action
+ bgp
+ as-path
+ prepend
+ as-number (number | keyword)
+ repeat-n number
+ remove boolean
+ replace number
+ communities
+ add reference
+ remove reference
+ replace reference
+ label-allocation
+ prefix-sid
+ reuse-igp boolean
+ local-preference

```

```

    + set number
  + med
  + set (number | keyword)
  + next-hop
  + set (ipv4-address | ipv6-address | keyword)
  + next-hop-resolution
  + set-tag-set reference
  + origin
  + set keyword
+ internal-tags
  + set-tag-set reference
+ policy-result keyword
+ route-preference
  + set number
+ match
  + bgp
  + as-path-length
  + operator keyword
  + unique boolean
  + value number
  + as-path-set reference
  + community-set reference
  + evpn
  + route-type number
+ family identityref
+ internal-tags
  + match-set-options keyword
  + tag-set reference
+ isis
  + level number
  + route-type keyword
+ multicast
  + group-address
  + prefix-set reference
  + source-address
  + prefix-set reference
+ ospf
  + area-id
  + instance-id number
  + route-type identityref
  + prefix-set reference
  + protocol identityref
+ prefix-set name string
  + prefix ip-prefix (ipv4-prefix | ipv6-prefix) mask-length-range string
+ tag-set name string
  - tag-set-index number
  + tag-value (number | hex-string)

```



## 10.1 routing-policy Descriptions

### routing-policy

<b>Description</b>	Top-level container for all routing policy configuration
<b>Context</b>	<a href="#">routing-policy</a>
<b>Tree</b>	<a href="#">routing-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### as-path-set *name string*

<b>Description</b>	AS Path regular expressions for use in policy entries
<b>Context</b>	<a href="#">routing-policy as-path-set name string</a>
<b>Tree</b>	<a href="#">as-path-set</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	A name used to identify the AS path regular expression
<b>Context</b>	<a href="#">routing-policy as-path-set name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### expression *string*

<b>Description</b>	A regular expression where each AS number is an elemental term
<b>Context</b>	<a href="#">routing-policy as-path-set name string expression string</a>
<b>Tree</b>	<a href="#">expression</a>
<b>String Length</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**community-set** *name string*

<b>Description</b>	List of BGP community sets containing standard, extended and large BGP communities
<b>Context</b>	<a href="#">routing-policy community-set name string</a>
<b>Tree</b>	<a href="#">community-set</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	A name used to identify the community set
<b>Context</b>	<a href="#">routing-policy community-set name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-set-options** *keyword*

<b>Description</b>	Options that determine the matching criteria that applies to the list of community members
<b>Context</b>	<a href="#">routing-policy community-set name string match-set-options keyword</a>
<b>Tree</b>	<a href="#">match-set-options</a>
<b>Default</b>	all
<b>Options</b>	<ul style="list-style-type: none"> <li>• any Match is true if any of the listed community member values is present in the route</li> <li>• all Match is true if all of the listed community member values are present in the route</li> <li>• invert Match is true if none of the listed community member values are present in the route</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**member** (*identityref* | *bgp-std-community-type* | *bgp-large-community-type* | *string* | *string* | *string* | *string* | *string* | *string* | *string* | *string* | *string* | *string* | *bgp-large-community-regexp-type* | *bgp-std-community-regexp-type*)

<b>Description</b>	A standard BGP community value, regular expression or well-known name or else a large BGP community value or regular expression
<b>Context</b>	<a href="#">routing-policy community-set name string member</a> ( <i>identityref</i>   <i>bgp-std-community-type</i>   <i>bgp-large-community-type</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>string</i>   <i>bgp-large-community-regexp-type</i>   <i>bgp-std-community-regexp-type</i> )
<b>Tree</b>	<a href="#">member</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>no-export Do not export NLRI received carrying this community outside the bounds of this autonomous system, or this confederation if the local autonomous system is a confederation member AS. This community has a value of 0xFFFFFFFF01.</li> <li>no-advertise All NLRI received carrying this community must not be advertised to other BGP peers. This community has a value of 0xFFFFFFFF02.</li> <li>no-export-subconfed All NLRI received carrying this community must not be advertised to external BGP peers - including over confederation sub-AS boundaries. This community has a value of 0xFFFFFFFF03.</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**policy name** *string*

<b>Description</b>	List of policy definitions, keyed by unique name These policy definitions are expected to be referenced (by name) in policy in import-policy and/or export-policy statements.
<b>Context</b>	<a href="#">routing-policy policy name string</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	A name used to identify the policy
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<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## default-action

<b>Description</b>	Actions for routes that do not match any policy entry
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action</a>
<b>Tree</b>	<a href="#">default-action</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## bgp

<b>Description</b>	Enter the bgp context
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## as-path

<b>Description</b>	Modify AS Path attribute of routes
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp</a> <a href="#">as-path</a>
<b>Tree</b>	<a href="#">as-path</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## prepend

<b>Description</b>	Prepend a BGP AS number to the AS Path attribute of routes
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp</a> <a href="#">as-path</a> <a href="#">prepend</a>
<b>Tree</b>	<a href="#">prepend</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**as-number** (*number* | *keyword*)

<b>Description</b>	The AS number to prepend to the AS Path attributes If 'auto' is specified then the peer's AS number is used in the context of an import policy and the local AS number is used in the context of an export policy.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp as-path prepend as-number</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">as-number</a>
<b>Range</b>	1 to 4294967295
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**repeat-n** *number*

<b>Description</b>	The number of repetitions of the prepended AS number
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp as-path prepend repeat-n</a> <i>number</i>
<b>Tree</b>	<a href="#">repeat-n</a>
<b>Range</b>	1 to 50
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**remove** *boolean*

<b>Description</b>	Clear the AS path to make it empty.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp as-path remove</a> <i>boolean</i>
<b>Tree</b>	<a href="#">remove</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**replace** *number*

<b>Description</b>	Clear the existing AS path and replace it a new AS_SEQUENCE containing the listed AS numbers.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp as-path replace</a> <i>number</i>

<b>Tree</b>	<a href="#">replace</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## communities

<b>Description</b>	Modify BGP communities attached to routes
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp communities</a>
<b>Tree</b>	<a href="#">communities</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## add *reference*

<b>Description</b>	Reference to a community-set name All of the non-regex community members in the referenced community-set are added to the COMMUNITIES and LARGE_COMMUNITIES attributes.
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp communities add reference</a>
<b>Tree</b>	<a href="#">add</a>
<b>Reference</b>	<a href="#">routing-policy community-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## remove *reference*

<b>Description</b>	Reference to a community-set name The communities in the route are compared to all of the community members in the referenced community-set, and all matching communities are removed from the COMMUNITIES and LARGE_COMMUNITIES attributes.
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp communities remove reference</a>
<b>Tree</b>	<a href="#">remove</a>
<b>Reference</b>	<a href="#">routing-policy community-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**replace** *reference*

<b>Description</b>	Reference to a community-set name  All of the existing communities are deleted and then all of the non-regex community members in the referenced community-set are encoded in new COMMUNITIES and LARGE_COMMUNITIES attributes.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp communities replace reference</a>
<b>Tree</b>	<a href="#">replace</a>
<b>Reference</b>	<a href="#">routing-policy community-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**label-allocation**

<b>Description</b>	Actions that determine the method used to assign labels to BGP LU routes matched and accepted by route-table-import policies
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp label-allocation</a>
<b>Tree</b>	<a href="#">label-allocation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid**

<b>Description</b>	RIB-OUT label is based on prefix SID configuration
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp label-allocation prefix-sid</a>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reuse-igp** *boolean*

<b>Description</b>	When true use the programmed SR-IGP label index for the matching prefix, resulting in a stitch to the IGP segment routing tunnel
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp label-allocation prefix-sid reuse-igp</a> <i>boolean</i>

<b>Tree</b>	<a href="#">reuse-igp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local-preference

<b>Description</b>	Enter the local-preference context
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp local-preference</a>
<b>Tree</b>	<a href="#">local-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## set number

<b>Description</b>	The new value of LOCAL_PREF to write into the matching BGP routes
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp local-preference set number</a>
<b>Tree</b>	<a href="#">set</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## med

<b>Description</b>	Enter the med context
<b>Context</b>	<a href="#">routing-policy policy name string default-action bgp med</a>
<b>Tree</b>	<a href="#">med</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## set (number | keyword)

<b>Description</b>	The new value of the Multi-Exit Discriminator attribute value to write into the matching BGP routes. The route-table-cost option derives the MED from the route metric.
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<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp med set</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">set</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>route-table-cost</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop

<b>Description</b>	Container for BGP next-hop modifications
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp next-hop</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## set (*ipv4-address* | *ipv6-address* | *keyword*)

<b>Description</b>	Set the protocol next-hop address of matched BGP routes
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp next-hop set</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">set</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>self</li> </ul> <p>Special designation for local router's own address, i.e., next-hop-self</p>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop-resolution

<b>Description</b>	Actions related to next-hop resolution of matched BGP routes
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">default-action bgp next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### set-tag-set *reference*

**Description** Reference to a tag-set to be used for controlling next-hop resolution

**Context** [routing-policy policy name string default-action bgp next-hop-resolution set-tag-set reference](#)

**Tree** [set-tag-set](#)

**Reference** [routing-policy tag-set name string](#)

**Configurable** True

**Platforms** Supported on all platforms

### origin

**Description** Enter the origin context

**Context** [routing-policy policy name string default-action bgp origin](#)

**Tree** [origin](#)

**Configurable** True

**Platforms** Supported on all platforms

### set *keyword*

**Description** The new value of the ORIGIN attribute to write into the matching BGP routes

**Context** [routing-policy policy name string default-action bgp origin set keyword](#)

**Tree** [set](#)

**Options**

- igp
- egp
- incomplete

**Configurable** True

**Platforms** Supported on all platforms

### internal-tags

**Description** Configuration of internal tags

**Context** [routing-policy policy name string default-action internal-tags](#)

**Tree** [internal-tags](#)

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **set-tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">internal-tags</a> <a href="#">set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **policy-result** *keyword*

<b>Description</b>	Select the action type for routes that do not match any policy statement.
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">policy-result</a> <i>keyword</i>
<b>Tree</b>	<a href="#">policy-result</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>accept</b> The route is accepted, route property modifications are applied, and evaluation stops immediately</li> <li>• <b>reject</b> The route is rejected and evaluation stops immediately</li> <li>• <b>next-policy</b> Route policy modifications are applied and evaluation continues to the next policy</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-preference**

<b>Description</b>	Options for modifying route preference
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">route-preference</a>
<b>Tree</b>	<a href="#">route-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**set number**

<b>Description</b>	<p>Overwrite the route preference with the specified value</p> <p>The IP route table preference is sometimes called the administrative distance of the route. In general, when comparing any two routes, the route with the lower preference is the one that is activated and used for forwarding.</p> <p>This action has an effect only in BGP import policies and VRF import policies</p>
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">default-action</a> <a href="#">route-preference</a> <a href="#">set number</a>
<b>Tree</b>	<a href="#">set</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statement** *name string*

<b>Description</b>	Policy statements group conditions and actions within a policy definition. They are evaluated in configuration order.
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i>
<b>Tree</b>	<a href="#">statement</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name given to the policy statement (rule).
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<b>Context</b>	<a href="#">routing-policy policy name string statement name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## action

<b>Description</b>	Actions for routes that match the policy statement
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action</a>
<b>Tree</b>	<a href="#">action</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## bgp

<b>Description</b>	Enter the bgp context
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## as-path

<b>Description</b>	Modify AS Path attribute of routes
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp as-path</a>
<b>Tree</b>	<a href="#">as-path</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## prepend

<b>Description</b>	Prepend a BGP AS number to the AS Path attribute of routes
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp as-path prepend</a>
<b>Tree</b>	<a href="#">prepend</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **as-number** (*number* | *keyword*)

**Description** The AS number to prepend to the AS Path attributes  
If 'auto' is specified then the peer's AS number is used in the context of an import policy and the local AS number is used in the context of an export policy.

**Context** [routing-policy policy name string statement name string action bgp as-path prepend as-number \(number | keyword\)](#)

**Tree** [as-number](#)

**Range** 1 to 4294967295

**Options**

- auto

**Configurable** True

**Platforms** Supported on all platforms

### **repeat-n** *number*

**Description** The number of repetitions of the prepended AS number

**Context** [routing-policy policy name string statement name string action bgp as-path prepend repeat-n number](#)

**Tree** [repeat-n](#)

**Range** 1 to 50

**Configurable** True

**Platforms** Supported on all platforms

### **remove** *boolean*

**Description** Clear the AS path to make it empty.

**Context** [routing-policy policy name string statement name string action bgp as-path remove boolean](#)

**Tree** [remove](#)

**Configurable** True

**Platforms** Supported on all platforms

**replace *number***

<b>Description</b>	Clear the existing AS path and replace it a new AS_SEQUENCE containing the listed AS numbers.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action bgp as-path</a> <a href="#">replace number</a>
<b>Tree</b>	<a href="#">replace</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**communities**

<b>Description</b>	Modify BGP communities attached to routes
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action bgp</a> <a href="#">communities</a>
<b>Tree</b>	<a href="#">communities</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**add *reference***

<b>Description</b>	Reference to a community-set name All of the non-regex community members in the referenced community-set are added to the COMMUNITIES and LARGE_COMMUNITIES attributes.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action bgp</a> <a href="#">communities add reference</a>
<b>Tree</b>	<a href="#">add</a>
<b>Reference</b>	<a href="#">routing-policy community-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**remove *reference***

<b>Description</b>	Reference to a community-set name The communities in the route are compared to all of the community members in the referenced community-set, and all matching communities are removed from the COMMUNITIES and LARGE_COMMUNITIES attributes.
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<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp communities remove reference</a>
<b>Tree</b>	<a href="#">remove</a>
<b>Reference</b>	<a href="#">routing-policy community-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### replace *reference*

<b>Description</b>	Reference to a community-set name All of the existing communities are deleted and then all of the non-regex community members in the referenced community-set are encoded in new COMMUNITIES and LARGE_COMMUNITIES attributes.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp communities replace reference</a>
<b>Tree</b>	<a href="#">replace</a>
<b>Reference</b>	<a href="#">routing-policy community-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### label-allocation

<b>Description</b>	Actions that determine the method used to assign labels to BGP LU routes matched and accepted by route-table-import policies
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp label-allocation</a>
<b>Tree</b>	<a href="#">label-allocation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-sid

<b>Description</b>	RIB-OUT label is based on prefix SID configuration
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action bgp label-allocation prefix-sid</a>
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### reuse-igp *boolean*

**Description** When true use the programmed SR-IGP label index for the matching prefix, resulting in a stitch to the IGP segment routing tunnel

**Context** [routing-policy policy name string statement name string action bgp label-allocation prefix-sid reuse-igp boolean](#)

**Tree** [reuse-igp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-preference

**Description** Enter the local-preference context

**Context** [routing-policy policy name string statement name string action bgp local-preference](#)

**Tree** [local-preference](#)

**Configurable** True

**Platforms** Supported on all platforms

### set *number*

**Description** The new value of LOCAL\_PREF to write into the matching BGP routes

**Context** [routing-policy policy name string statement name string action bgp local-preference set number](#)

**Tree** [set](#)

**Configurable** True

**Platforms** Supported on all platforms

### med

**Description** Enter the med context

**Context** [routing-policy policy name string statement name string action bgp med](#)

**Tree** [med](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### set (*number* | *keyword*)

**Description** The new value of the Multi-Exit Discriminator attribute value to write into the matching BGP routes. The route-table-cost option derives the MED from the route metric.

**Context** [routing-policy](#) [policy name](#) *string* [statement name](#) *string* [action](#) [bgp](#) [med](#) [set](#) (*number* | *keyword*)

**Tree** [set](#)

**Options**

- route-table-cost

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### next-hop

**Description** Container for BGP next-hop modifications

**Context** [routing-policy](#) [policy name](#) *string* [statement name](#) *string* [action](#) [bgp](#) [next-hop](#)

**Tree** [next-hop](#)

**Configurable** True

**Platforms** Supported on all platforms

### set (*ipv4-address* | *ipv6-address* | *keyword*)

**Description** Set the protocol next-hop address of matched BGP routes

**Context** [routing-policy](#) [policy name](#) *string* [statement name](#) *string* [action](#) [bgp](#) [next-hop](#) [set](#) (*ipv4-address* | *ipv6-address* | *keyword*)

**Tree** [set](#)

**Options**

- self
  - Special designation for local router's own address, i.e., next-hop-self

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## next-hop-resolution

<b>Description</b>	Actions related to next-hop resolution of matched BGP routes
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action</a> <a href="#">bgp</a> <a href="#">next-hop-resolution</a>
<b>Tree</b>	<a href="#">next-hop-resolution</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## set-tag-set *reference*

<b>Description</b>	Reference to a tag-set to be used for controlling next-hop resolution
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action</a> <a href="#">bgp</a> <a href="#">next-hop-resolution</a> <a href="#">set-tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">tag-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## origin

<b>Description</b>	Enter the origin context
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action</a> <a href="#">bgp</a> <a href="#">origin</a>
<b>Tree</b>	<a href="#">origin</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## set *keyword*

<b>Description</b>	The new value of the ORIGIN attribute to write into the matching BGP routes
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">action</a> <a href="#">bgp</a> <a href="#">origin</a> <a href="#">set</a> <i>keyword</i>
<b>Tree</b>	<a href="#">set</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">igp</a></li> </ul>

	<ul style="list-style-type: none"> <li>• <code>egp</code></li> <li>• <code>incomplete</code></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## internal-tags

<b>Description</b>	Configuration of internal tags
<b>Context</b>	<a href="#">routing-policy</a> <code>policy name string statement name string action internal-tags</code>
<b>Tree</b>	<a href="#">internal-tags</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## set-tag-set *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">routing-policy</a> <code>policy name string statement name string action internal-tags set-tag-set reference</code>
<b>Tree</b>	<a href="#">set-tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <code>tag-set name string</code>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

## policy-result *keyword*

<b>Description</b>	Select the action to apply to matching routes If no value is configured for the policy-result then the entire statement is skipped and ignored.
<b>Context</b>	<a href="#">routing-policy</a> <code>policy name string statement name string action policy-result keyword</code>
<b>Tree</b>	<a href="#">policy-result</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>accept</b> The route is accepted, route property modifications are applied, and evaluation stops immediately</li> <li>• <b>reject</b> The route is rejected and evaluation stops immediately</li> <li>• <b>next-statement</b> Route policy modifications are applied and evaluation continues to the next statement</li> <li>• <b>next-policy</b> Route policy modifications are applied and evaluation continues to the next policy</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## route-preference

<b>Description</b>	Options for modifying route preference
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action route-preference</a>
<b>Tree</b>	<a href="#">route-preference</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## set number

<b>Description</b>	<p>Overwrite the route preference with the specified value</p> <p>The IP route table preference is sometimes called the administrative distance of the route. In general, when comparing any two routes, the route with the lower preference is the one that is activated and used for forwarding. This action has an effect only in BGP import policies and VRF import policies</p>
<b>Context</b>	<a href="#">routing-policy policy name string statement name string action route-preference set number</a>
<b>Tree</b>	<a href="#">set</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## match

<b>Description</b>	Match conditions of the policy statement
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a>
<b>Tree</b>	<a href="#">match</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## bgp

<b>Description</b>	Configuration for BGP-specific policy match criteria
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## as-path-length

<b>Description</b>	A BGP route matches this condition if the number of (unique) AS numbers in its AS_PATH matches this value or the range implied by the value+operator.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">bgp</a> <a href="#">as-path-length</a>
<b>Tree</b>	<a href="#">as-path-length</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## operator *keyword*

<b>Description</b>	The comparison operator that applies to the value
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">bgp</a> <a href="#">as-path-length</a> <a href="#">operator</a> <i>keyword</i>
<b>Tree</b>	<a href="#">operator</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• eq</li> <li>• ge</li> </ul>

- le

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **unique** *boolean*

<b>Description</b>	Count a repeated sequence of the same AS number as just 1 element
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp as-path-length unique boolean</a>
<b>Tree</b>	<a href="#">unique</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **value** *number*

<b>Description</b>	The number of (unique) AS numbers in the AS path
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp as-path-length value number</a>
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **as-path-set** *reference*

<b>Description</b>	Reference to an as-path-set name A route meets this condition if it matches the regular expression
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp as-path-set reference</a>
<b>Tree</b>	<a href="#">as-path-set</a>
<b>Reference</b>	<a href="#">routing-policy as-path-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **community-set** *reference*

<b>Description</b>	Reference to a community-set name
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	A route meets this condition if has any community value matching a community member in the referenced community-set
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp community-set reference</a>
<b>Tree</b>	<a href="#">community-set</a>
<b>Reference</b>	<a href="#">routing-policy community-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**evpn**

<b>Description</b>	Container for match conditions that are specific to BGP EVPN routes.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-type number**

<b>Description</b>	An EVPN route meets this condition if the route-type field in the NLRI is one of the values provided in this list.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match bgp evpn route-type number</a>
<b>Tree</b>	<a href="#">route-type</a>
<b>Range</b>	1 to 8
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

**family identityref**

<b>Description</b>	The name of an address family A route meets this condition if the prefix belongs to one of the indicated address families.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match family identityref</a>
<b>Tree</b>	<a href="#">family</a>



**Options**

- ipv4-unicast  
Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)
- ipv6-unicast  
Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)
- l3vpn-ipv4-unicast  
VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)
- l3vpn-ipv6-unicast  
VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)
- ipv4-labeled-unicast  
Labeled IPv4 unicast routes (AFI 1, SAFI 4)
- ipv6-labeled-unicast  
Labeled IPv6 unicast routes (AFI 2, SAFI 4)
- evpn  
EVPN routes (AFI = 25, SAFI = 70)
- route-target  
Route target constraint routes (AFI 1, SAFI 132)
- sr-policy-ipv4  
SR-TE Policy (AFI 1, SAFI 73)
- sr-policy-ipv6  
SR-TE Policy (AFI 2, SAFI 73)

**Configurable**

True

**Platforms**

Supported on all platforms

**internal-tags****Description**

Configuration and state of internal tags

**Context**[routing-policy](#) *policy name* *string* *statement name* *string* *match* *internal-tags***Tree**[internal-tags](#)**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**match-set-options** *keyword*

<b>Description</b>	Options that determine the matching criteria that applies to the members in the referenced set
<b>Context</b>	<a href="#">routing-policy</a> <i>policy name string</i> <a href="#">statement name string</a> <a href="#">match</a> <a href="#">internal-tags</a> <a href="#">match-set-options</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-set-options</a>
<b>Default</b>	any
<b>Options</b>	<ul style="list-style-type: none"> <li>• any Match is true if any of the members in the referenced set is present in the route</li> <li>• all Match is true if all of the members in the referenced set are present in the route</li> <li>• invert Match is true if none of the members in the referenced set are present in the route</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tag-set** *reference*

<b>Description</b>	Reference to a tag-set defined under routing-policy
<b>Context</b>	<a href="#">routing-policy</a> <i>policy name string</i> <a href="#">statement name string</a> <a href="#">match</a> <a href="#">internal-tags</a> <a href="#">tag-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">tag-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <i>tag-set name string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**isis**

<b>Description</b>	Configuration for ISIS-specific policy match criteria
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match isis</a>
<b>Tree</b>	<a href="#">isis</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**level number**

<b>Description</b>	Match an IS-IS route based on its level
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match isis level number</a>
<b>Tree</b>	<a href="#">level</a>
<b>Range</b>	1 to 2
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-type keyword**

<b>Description</b>	Match an IS-IS route based on its type  An IS-IS IPv4 prefix is external if it is signalled in TLV 130 or TLV135 with RFC 7794 X flag=1. An IS-IS IPv6 prefix is external if the TLV 236/TLV 237 external bit = 1.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match isis route-type keyword</a>
<b>Tree</b>	<a href="#">route-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• internal Match internal AND external routes</li> <li>• external Match only external routes</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**multicast**

<b>Description</b>	Enter the multicast context
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<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">multicast</a>
<b>Tree</b>	<a href="#">multicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group-address

<b>Description</b>	Enter the group-address context
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">multicast</a> <a href="#">group-address</a>
<b>Tree</b>	<a href="#">group-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## prefix-set *reference*

<b>Description</b>	Multicast group IP address  <S,G> the source needs to be present in the multicast source-address leafref and the group needs to present in the group-address leafref. To match a <*,G> the group has to be programmed in the group-address leafref and no source in the source-address leafref. Group address can be configured as a prefix.
<b>Context</b>	<a href="#">routing-policy</a> <a href="#">policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match</a> <a href="#">multicast</a> <a href="#">group-address</a> <a href="#">prefix-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-set</a>
<b>Reference</b>	<a href="#">routing-policy</a> <a href="#">prefix-set</a> <a href="#">name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address**

<b>Description</b>	Enter the source-address context
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match multicast source-address</a>
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-set *reference***

<b>Description</b>	Multicast source IP address Source address can be configured as a prefix.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match multicast source-address prefix-set reference</a>
<b>Tree</b>	<a href="#">prefix-set</a>
<b>Reference</b>	<a href="#">routing-policy prefix-set name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ospf**

<b>Description</b>	Configuration for OSPF-specific policy match criteria
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match ospf</a>
<b>Tree</b>	<a href="#">ospf</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-id**

<b>Description</b>	The area identifier as a dotted-quad.
<b>Context</b>	<a href="#">routing-policy policy name string statement name string match ospf area-id</a>

<b>Tree</b>	<a href="#">area-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**instance-id** *number*

<b>Description</b>	OSPFv3 instance identifier
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match ospf instance-id</a> <i>number</i>
<b>Tree</b>	<a href="#">instance-id</a>
<b>Range</b>	0 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-type** *identityref*

<b>Description</b>	The OSPF route type.
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match ospf route-type</a> <i>identityref</i>
<b>Tree</b>	<a href="#">route-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">type-1-ext</a> The route has path-type type 1 external</li> <li>• <a href="#">type-2-ext</a> The route has path-type type 2 external</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-set** *reference*

<b>Description</b>	Reference to a prefix set name
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match prefix-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">prefix-set</a>
<b>Reference</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**protocol** *identityref*

<b>Description</b>	The route type to match
<b>Context</b>	<a href="#">routing-policy policy name</a> <i>string</i> <a href="#">statement name</a> <i>string</i> <a href="#">match protocol identityref</a>
<b>Tree</b>	<a href="#">protocol</a>
<b>Options</b>	<ul style="list-style-type: none"> <li><a href="#">routing-policy-protocol-match-type</a> Base type for the types of routes and tunnels that can be matched by a route policy statement</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix-set** *name string*

<b>Description</b>	List of defined prefix sets
<b>Context</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix-set</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	A name used to identify the prefix set
<b>Context</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**prefix** *ip-prefix (ipv4-prefix | ipv6-prefix) mask-length-range string*

<b>Description</b>	List of prefixes in the prefix set
<b>Context</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i> <a href="#">prefix ip-prefix (ipv4-prefix   ipv6-prefix) mask-length-range</a> <i>string</i>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The IPv4 or IPv6 prefix in CIDR notation
<b>Context</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i> <a href="#">prefix ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">mask-length-range</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mask-length-range** *string*

<b>Description</b>	The range of prefix lengths to match  Example: 10.3.192.0/21 through 10.3.192.0/24 would be expressed as prefix: 10.3.192.0/21, mask-length-range: 21..24.  Example: 10.3.192.0/21 would be expressed as prefix: 10.3.192.0/21, mask-length-range: exact
<b>Context</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i> <a href="#">prefix ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">mask-length-range</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tag-set** [name](#) *string*

<b>Description</b>	List of administrative tag sets
<b>Context</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>Tree</b>	<a href="#">tag-set</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1024

**name** *string*

<b>Description</b>	A name used to identify the tag set
<b>Context</b>	<a href="#">routing-policy tag-set name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tag-set-index** *number*

**Description** System-wide persistent unique identifier assigned to the tag-set

**Context** [routing-policy](#) [tag-set name](#) *string* [tag-set-index](#) *number*

**Tree** [tag-set-index](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tag-value** (*number* | *hex-string*)

**Description** Value of the tag set member

**Context** [routing-policy](#) [tag-set name](#) *string* [tag-value](#) (*number* | *hex-string*)

**Tree** [tag-value](#)

**String Length** 1 to 11

**Range** 1 to 4294967295

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 2

**Min. Elements** 1

# 11 system

```

system
+ aaa
+ accounting
+ accounting-method reference
+ acctz
+ history-size number
+ event event-type identityref
+ record identityref
+ authentication
+ admin-user
- credentialz
- authorized-keys
- created-on string
- version string
- authorized-principals
- created-on string
- version string
- password
- created-on string
- version string
- failed-login-attempts number
- last-failed-login string
- last-successful-login string
- lockout
- active boolean
- end string
- start string
+ password string
- password-change-required boolean
+ role reference
+ spiffe-ids string
+ ssh-key string
+ ssh-principals string
+ superuser boolean
- username string
+ authentication-method reference
+ dynamic-spiffe
+ allow boolean
+ role reference
+ exit-on-reject boolean
+ idle-timeout number
+ linuxadmin-user
- credentialz
- authorized-keys
- created-on string
- version string
- authorized-principals
- created-on string
- version string
- password
- created-on string
- version string
+ password string
+ ssh-key string
+ ssh-principals string
- username string

```

```

+ local-linux-users
+ disable-login keyword
+ password
+ aging number
+ change-on-first-login boolean
+ complexity-rules
+ allow-username boolean
+ maximum-length number
+ minimum-length number
+ minimum-lowercase number
+ minimum-numeric number
+ minimum-special-character number
+ minimum-uppercase number
+ hash-method keyword
+ history number
+ lockout-policy
+ attempts number
+ lockout number
+ time number
+ require-ntp-sync boolean
- session id number
- authentication-method string
- login-time string
- network-instance string
- priv-lvl number
- remote-host string
- role string
- service-name string
- spiffe-id string
- tty-name string
- username string
+ user username string
- credentialz
- authorized-keys
- created-on string
- version string
- authorized-principals
- created-on string
- version string
- password
- created-on string
- version string
- failed-login-attempts number
- last-failed-login string
- last-successful-login string
- lockout
- active boolean
- end string
- start string
+ password string
- password-change-required boolean
+ role reference
+ spiffe-ids string
+ ssh-key string
+ ssh-principals string
+ superuser boolean
+ authorization
- authz-policy
- counters
- rpc name string
- access-accepts number
- access-rejects number
- last-access-accept string
- last-access-reject string

```

```

- created-on string
- policy string
- version string
+ role rolename string
+ cli
+ allow-command-list string
+ deny-command-list string
+ load-global-plugins boolean
+ load-user-plugins boolean
+ netconf
+ allowed-operations keyword
+ services keyword
+ superuser boolean
+ tacacs
+ priv-lvl number
+ server-group name string
+ priv-lvl-authorization boolean
+ server address (ipv4-address | ipv6-address)
+ name string
+ network-instance reference
- oper-state keyword
+ radius
+ acct-port number
+ auth-port number
+ retransmit-attempts number
+ secret-key string
+ source-address (ipv4-address | ipv6-address)
- statistics
- accounting-connection-failures number
- accounting-rejects number
- accounting-success number
- authorization-connection-failures number
- authorization-rejects number
- authorization-success number
- login-connection-failures number
- login-rejects number
- login-success number
+ tacacs
+ port number
+ secret-key string
+ source-address (ipv4-address | ipv6-address)
+ timeout number
+ type identityref
- app-management
- application name string
- author string
- cgroup string
- failure-action string
- failure-threshold number
- failure-window number
- last-change string
- last-start-type keyword
- launch-command string
- oom-score-adj number
- path string
- pid number
- restricted-operations keyword
- search-command string
- state keyword
- statistics
- restart-count number
- supported-restart-types keyword
- version string
- yang

```

```

- modules string
- source-directories string
+ authentication
+ keychain name string
- active-key-for-send (keyword | reference)
+ admin-state keyword
+ description string
- expired boolean
+ key index number
+ algorithm keyword
+ authentication-key string
+ receive-lifetime
+ end-time (keyword | date-and-time-delta)
+ start-time string
+ send-lifetime
+ send-and-receive boolean
+ start-time string
+ tolerance number
+ type keyword
- usable boolean
+ banner
+ login-banner string
+ motd-banner string
+ boot
+ autoboot
+ admin-state keyword
+ attempts number
+ client-id keyword
+ interface reference
+ mode string
- oper-state string
+ timeout number
+ fips-140
+ admin-state keyword
- oper-down-reason keyword
- oper-state keyword
- golden-image string
- image string
+ bridge-table
+ evpn
+ mpls-multicast-tep
- statistics
- active-entries number
- max-entries number
- total-entries number
- tep tep (ipv4-address | ipv6-address)
- index number
- last-changed string
+ mac-learning
- mac-relearn-only boolean
+ mac-limit
- maximum-entries number
- warning-threshold-pct number
- proxy-arp
- statistics
- active-entries number
- in-active-entries number
- neighbor-origin origin keyword
- active-entries number
- in-active-entries number
- pending-entries number
- total-entries number
- pending-entries number
- total-entries number

```

```

- proxy-nd
- statistics
- active-entries number
- in-active-entries number
- neighbor-origin origin keyword
- active-entries number
- in-active-entries number
- pending-entries number
- total-entries number
- pending-entries number
- total-entries number
- statistics
- active-entries number
- failed-entries number
- mac-type type keyword
- active-entries number
- failed-entries number
- total-entries number
+ clock
+ timezone keyword
+ configuration
+ auto-checkpoint boolean
+ auto-save boolean
- candidate name string
- started string
- type keyword
- username string
- checkpoint id number
- comment string
- created string
- name string
- size number
- tag string
- username string
- version string
- commit id number
- comment string
- ended string
- name string
- persist-id string
- started string
- status keyword
- type keyword
- username string
+ idle-timeout number
- last-change string
+ max-candidates number
+ max-checkpoints number
+ pathz
+ collect-policy-success-failure-counters boolean
- policy instance keyword
- created-on string
- policy string
- version string
+ use-exclusively boolean
+ role name reference
+ rule path-reference string
+ action keyword
- session id number
- exclusive boolean
- name string
- started string
- type keyword

```

```

- username string
+ control-plane-traffic
+ input
+ acl
+   acl-filter name reference type reference
+ output
+ qos
+   management-protocols-dscp (number | keyword)
+ datapath
+ forwarding-mode keyword
+ icmp
+ rate-limit-per-host
+   max-burst number
+   peak-rate number
+ icmp6
+ rate-limit-per-host
+   max-burst number
+   peak-rate number
+ dhcp-server
+ admin-state keyword
+ network-instance name reference
+ dhcpv4
+ admin-state keyword
- oper-state keyword
+ options
+ bootfile-name string
+ dns-server string
+ domain-name string
+ hostname string
+ ntp-server string
+ router string
+ server-id string
+ tftp-server-address string
+ tftp-server-name string
+ static-allocation
+ host mac string
+ ip-address string
+ options
+   bootfile-name string
+   dns-server string
+   domain-name string
+   hostname string
+   ntp-server string
+   router string
+   server-id string
+   tftp-server-address string
+   tftp-server-name string
- statistics
- client-packets-discarded number
- client-packets-received number
- server-packets-sent number
+ trace-options
+ trace keyword
+ dhcpv6
+ admin-state keyword
- oper-state keyword
+ options
+ dns-server string
+ static-allocation
+ host mac string
+ ip-address string
+ options
+   dns-server string
- statistics

```

```

- client-packets-discarded number
- client-packets-received number
- server-packets-sent number
+ trace-options
+ trace keyword
+ dns
+ host-entry name string
+ ipv4-address string
+ ipv6-address string
+ network-instance reference
- oper-state keyword
+ search-list string
+ server-list (ipv4-address | ipv6-address)
+ source-address (ipv4-address | ipv6-address)
+ event-handler
+ instance name string
+ admin-state keyword
- last-errored-execution
- end-time string
- input string
- oper-down-reason keyword
- oper-down-reason-detail string
- output string
- start-time string
- stdout-stderr string
- upython-duration number
- last-execution
- end-time string
- input string
- oper-down-reason keyword
- oper-down-reason-detail string
- output string
- start-time string
- stdout-stderr string
- upython-duration number
- oper-state keyword
+ options
+ object name string
+ value string
+ values string
+ paths string
- statistics
- execution-count number
- execution-errors number
- execution-successes number
- execution-timeouts number
- upython-duration number
+ upython-script string
+ run-as-user reference
- features string
+ ftp-server
+ network-instance name reference
+ admin-state keyword
- oper-state keyword
+ session-limit number
+ source-address (ipv4-address | ipv6-address)
+ timeout number
+ grpc-server name string
+ admin-state keyword
- certz
- certificate
- created-on string
- version string
- crl

```



```

-   created-on string
-   version string
-   ssl-profile-id string
-   trust-anchor
-     - created-on string
-     - version string
- client id number
- acctz-starting-point string
- election-id string
- gnmi
-   - paths id number
-     - mode keyword
-     - path string
-     - sample-interval number
- gribi
-   - persistence-mode keyword
- p4rt
-   - forwarding-complex
-     - device number
-     - id string
-     - slot number
-     - primary boolean
- remote-host (ipv4-address | ipv6-address)
- remote-port number
- rpc string
- start-time string
- type keyword
- user string
- user-agent string
+ default-tls-profile boolean
+ gnmi
+   + commit-confirmed-timeout number
+   + commit-save boolean
+   + include-defaults-in-config-only-responses boolean
+ max-concurrent-streams number
+ metadata-authentication boolean
+ network-instance reference
- oper-state keyword
- pathz
-   - counters
-     - path name string
-     - reads
-       - access-accepts number
-       - access-rejects number
-       - last-access-accept string
-       - last-access-reject string
-     - writes
-       - access-accepts number
-       - access-rejects number
-       - last-access-accept string
-       - last-access-reject string
-   - created-on string
-   - policy string
-   - version string
+ port number
+ rate-limit number
+ services identityref
+ session-limit number
+ source-address (ipv4-address | ipv6-address)
- statistics
-   - access-accepts number
-   - access-rejects number
-   - last-access-accept string
-   - last-access-reject string

```

```

- rpc name string
  - access-accepts number
  - access-rejects number
  - last-access-accept string
  - last-access-reject string
+ timeout number
+ tls-profile reference
+ trace-options keyword
+ unix-socket
  + admin-state keyword
  - socket-path string
+ yang-models keyword
+ information
  + contact string
  - current-datetime string
  - description string
  - last-booted string
  + location string
  - version string
+ json-rpc-server
  + admin-state keyword
  + commit-confirmed-timeout number
  + network-instance name reference
  + http
    + admin-state keyword
    - oper-state keyword
    + port number
    + session-limit number
    + source-address (ipv4-address | ipv6-address)
    + use-authentication boolean
  + https
    + admin-state keyword
    - oper-state keyword
    + port number
    + session-limit number
    + source-address (ipv4-address | ipv6-address)
    + tls-profile reference
    + use-authentication boolean
+ trace-options keyword
+ unix-socket
  + admin-state keyword
  - oper-state keyword
  - socket-path string
  + tls-profile reference
  + use-authentication boolean
- l2cp-transparency
  - l2cp-statistics
    - dot1x
      - in-trap-to-cpu-packets number
      - in-tunneled-packets number
      - last-clear string
    - efm-oam
      - in-trap-to-cpu-packets number
      - in-tunneled-packets number
      - last-clear string
    - elmi
      - in-trap-to-cpu-packets number
      - in-tunneled-packets number
      - last-clear string
    - esmc
      - in-trap-to-cpu-packets number
      - in-tunneled-packets number
      - last-clear string
    - lacp

```

```

- in-trap-to-cpu-packets number
- in-tunneled-packets number
- last-clear string
- last-clear string
- lldp
- in-trap-to-cpu-packets number
- in-tunneled-packets number
- last-clear string
- ptp
- in-trap-to-cpu-packets number
- in-tunneled-packets number
- last-clear string
- total-in-discarded-packets number
- total-in-packets number
- total-in-trap-to-cpu-packets number
- total-in-tunneled-packets number
- xstp
- in-trap-to-cpu-packets number
- in-tunneled-packets number
- last-clear string
+ lacp
+ system-id string
+ system-priority number
+ license id string
+ admin-state keyword
+ data string
+ description string
- expiration-date string
- expired boolean
- in-use boolean
- issued-date string
+ preferred boolean
- valid boolean
+ lldp
+ admin-state keyword
- chassis-id string
- chassis-id-type keyword
+ hello-timer number
+ hold-multiplier number
+ interface name reference
+ admin-state keyword
- neighbor id string
- capability name identityref
- enabled boolean
- chassis-id string
- chassis-id-type keyword
- custom-tlv type number oui string oui-subtype string
- value binary
- first-message string
- last-update string
- management-address address string
- type keyword
- port-description string
- port-id (string | binary)
- port-id-type keyword
- system-description string
- system-name string
- oper-state keyword
- statistics
- frame-discard number
- frame-error-in number
- frame-error-out number
- frame-in number
- frame-out number

```

```

    - last-clear string
    - tlv-discard number
    - tlv-unknown number
+ management-address subinterface string
+ type keyword
- statistics
- entries-aged-out number
- frame-discard number
- frame-error-in number
- frame-in number
- frame-out number
- last-clear string
- tlv-accepted number
- tlv-discard number
- tlv-unknown number
- system-description string
- system-name string
+ trace-options keyword
+ load-balancing
+ hash-options
+ destination-address boolean
+ destination-port boolean
+ hash-seed (number | keyword)
+ ipv6-flow-label boolean
+ mpls-label-stack boolean
+ protocol boolean
+ source-address boolean
+ source-port boolean
+ vlan boolean
+ lsr-profile keyword
+ logging
+ buffer buffer-name string
+ facility facility-name keyword
+ priority
+ match-above keyword
+ match-exact keyword
+ filter reference
+ format (string | keyword)
+ persist number
+ rotate number
- rotations number
+ size string
+ subsystem subsystem-name keyword
+ priority
+ match-above keyword
+ match-exact keyword
+ console
+ facility facility-name keyword
+ priority
+ match-above keyword
+ match-exact keyword
+ filter reference
+ format (string | keyword)
+ subsystem subsystem-name keyword
+ priority
+ match-above keyword
+ match-exact keyword
+ file file-name string
+ directory string
+ facility facility-name keyword
+ priority
+ match-above keyword
+ match-exact keyword
+ filter reference

```

```

+ format (string | keyword)
+ rotate number
- rotations number
+ size string
+ subsystem subsystem-name keyword
  + priority
    + match-above keyword
    + match-exact keyword
+ filter filter-name string
+ contains string
+ facility facility-name keyword
  + priority
    + match-above keyword
    + match-exact keyword
+ prefix string
+ regex string
+ tag string
+ network-instance reference
+ remote-server host (ipv4-address | ipv6-address | domain-name)
+ facility facility-name keyword
  + priority
    + match-above keyword
    + match-exact keyword
+ filter reference
+ format (string | keyword)
+ remote-port number
+ source-address (ipv4-address | ipv6-address)
+ subsystem subsystem-name keyword
  + priority
    + match-above keyword
    + match-exact keyword
+ transport keyword
+ subsystem-facility keyword
+ use-fqdn boolean
+ maintenance
+ group name string
+ maintenance-mode
  + admin-state keyword
+ maintenance-profile reference
+ members
  + bgp
    + network-instance name reference
    + neighbor reference
    + peer-group reference
+ profile name string
  + bgp
    + export-policy reference
    + import-policy reference
+ management
+ openconfig
  + admin-state keyword
  - oper-state keyword
+ mirroring
+ mirroring-instance name string
  + admin-state keyword
  + description string
  + mirror-destination
    + local string
    + remote
      + encap keyword
      + network-instance reference
      + tunnel-end-points
        + admin-state keyword
        + destination-address (ipv4-address | ipv6-address)

```

```

    - oper-state keyword
    + service-label number
    + source-address (ipv4-address | ipv6-address)
  - statistics
    - egress-mirrored-octets number
    - egress-mirrored-packets number
    - ingress-mirrored-octets number
    - ingress-mirrored-packets number
+ mirror-source
+ acl
  + acl-filter name reference type reference
  + entry sequence-id reference
+ interface name string
+ direction keyword
+ subinterface name string
  + direction keyword
  - oper-down-reason keyword
  - oper-state keyword
- oper-down-reason keyword
- oper-state keyword
+ mpls
+ label-ranges
+ dynamic name string
  - allocated-labels number
+ end-label number
  - free-labels number
+ start-label number
  - status keyword
  - user index number
  - owner identityref
+ static name string
  - allocated-labels number
+ end-label number
  - free-labels number
+ shared boolean
+ start-label number
  - status keyword
  - user index number
  - owner identityref
+ services
+ evpn
  + dynamic-label-block reference
+ network-instance
  + dynamic-evpn-inclusive-multicast-label-block reference
  + dynamic-label-block reference
  + static-label-block reference
+ mtu
+ default-ip-mtu number
+ default-l2-mtu number
+ default-mpls-mtu number
+ default-port-mtu number
+ min-path-mtu number
+ multicast
+ multicast-ids
  - statistics
    - current-usage number
    - maximum-ids number
    - multicast-id-user-type user keyword
    - current-usage number
    - total-pending number
    - total-pending number
- multicast-forwarding-information-base
  - multicast-route network-instance reference source (ipv4-address | ipv6-
address) group (ipv4-address | ipv6-address)

```

```

- last-update string
- line-card-replication-index number
+ name
+ domain-name string
+ host-name string
+ netconf-server name string
+ admin-state keyword
- last-oper-change string
- oper-state keyword
+ session-limit number
+ ssh-server reference
- statistics
- active-sessions number
- session session-id number
- action-requests number
- commit-requests number
- copy-config-requests number
- delete-config-requests number
- discard-changes-requests number
- edit-config-requests number
- edit-data-requests number
- failed-edit-config-requests number
- failed-edit-data-requests number
- failed-lock-requests number
- get-config-requests number
- get-data-requests number
- get-requests number
- get-schema-requests number
- in-bad-hellos number
- kill-session-requests number
- lock-requests number
- process-id number
- unlock-requests number
- validate-requests number
- total-action-requests number
- total-close-session-requests number
- total-commit-requests number
- total-copy-config-requests number
- total-delete-config-requests number
- total-discard-changes-requests number
- total-dropped-sessions number
- total-edit-config-requests number
- total-edit-data-requests number
- total-error-responses number
- total-failed-edit-config-requests number
- total-failed-edit-data-requests number
- total-failed-lock-requests number
- total-get-config-requests number
- total-get-data-requests number
- total-get-requests number
- total-get-schema-requests number
- total-in-bad-hellos number
- total-kill-session-requests number
- total-lock-requests number
- total-requests number
- total-responses number
- total-unlock-requests number
- total-validate-requests number
+ trace-options
+ direction keyword
+ rpc keyword
+ unix-socket
- socket-path string
+ network-instance

```

```

+ protocols
+   bgp-vpn
+     bgp-instance id number
+     - oper-down-reason keyword
+     route-distinguisher
+     - rd (route-distinguisher-type-0 | route-distinguisher-type-1 | route-
distinguisher-type-2 | route-distinguisher-type-2b)
+     - route-distinguisher-origin keyword
+     route-target
+     - export-route-target-origin keyword
+     - import-route-target-origin keyword
+   evpn
+     ethernet-segments
+     + bgp-instance id reference
+     + ethernet-segment name string
+     + admin-state keyword
+     - association
+     - network-instance name string
+     - bgp-instance instance number
+     - computed-designated-forwarder-candidates
+     - designated-forwarder-candidate address (ipv4-address | ipv6-
address)
+     - add-time string
+     - designated-forwarder boolean
+     - designated-forwarder-activation-start-time string
+     - designated-forwarder-activation-time number
+     - designated-forwarder-role-last-change string
+     - autodiscovery-per-ethernet-segment-routes
+     - attr-id reference
+     - esi string
+     - ethernet-tag-id number
+     - label
+     - value number
+     - value-type keyword
+     - neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
+     - path-id number
+     - route-distinguisher (route-distinguisher-type-0 | route-distinguisher-
type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b)
+     + df-election
+     + algorithm
+     + manual-alg
+     + primary-evi-range start-evi number
+     + end-evi number
+     - oper-type keyword
+     + preference-alg
+     + capabilities
+     + ac-df keyword
+     + non-revertive boolean
+     - oper-do-not-preempt boolean
+     - oper-preference-value number
+     + preference-value number
+     + type keyword
+     + interface-standby-signaling-on-non-df
+     + timers
+     + activation-timer number
+     + esi string
+     - esi-label number
+     - ethernet-segment-routes
+     - attr-id reference
+     - esi string
+     - neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
+     - originating-router (ipv4-address | ipv6-address)
+     - path-id number

```



```

- route-distinguisher (route-distinguisher-type-0 | route-distinguisher-
type-1 | route-distinguisher-type-2 | route-distinguisher-type-2b)
+ interface ethernet-interface reference
+ multi-homing-mode keyword
+ next-hop l3-next-hop (ipv4-address | ipv6-address)
+ evi start number
- oper-down-reason keyword
- oper-esi string
- oper-multi-homing-mode keyword
- oper-state keyword
+ routes
+ ethernet-segment
+   + originating-ip keyword
+   + next-hop keyword
+ type keyword
+ timers
+ activation-timer number
- boot-remaining-time number
- boot-start-time string
+ boot-timer number
+ multicast
+ leave-sync-propagation number
+ ntp
+ admin-state keyword
+ network-instance reference
- oper-state keyword
+ server address (ipv4 | ipv6 | domain-name)
+ iburst boolean
- jitter number
- offset number
- poll-interval number
+ prefer boolean
- root-delay number
- root-dispersion number
- stratum number
+ source-address (ipv4-address | ipv6-address)
- synchronized (ipv4-address | ipv6-address | domain-name | string)
+ packet-link-qualification
+ profile name string
+ asic-loopback
+ ntp
+ end-time string
+ start-time string
+ teardown-time string
+ packet-generator
+ packet-rate number
+ packet-size number
+ rpc
+ duration number
+ post-sync-duration number
+ pre-sync-duration number
+ setup-duration number
+ teardown-duration number
+ protocols
+ bgp
+ restart-max-wait number
+ ra-guard-policy name string
+ action keyword
+ advertise-prefix-set reference
+ hop-limit number
+ managed-config-flag boolean
+ other-config-flag boolean
+ router-preference keyword
+ source-prefix-set reference

```

```

+ sflow
+ admin-state keyword
+ collector collector-id number
+ collector-address (ipv4-address | ipv6-address)
+ network-instance reference
- next-hop (ipv4-address | ipv6-address)
+ port number
+ source-address (ipv4-address | ipv6-address)
+ dscp number
+ sample-rate number
+ sample-size number
+ source-address (ipv4-address | ipv6-address)
- statistics
- total-offered-packets number
- total-samples-taken number
- total-sent-packets number
+ snmp
+ access-group name string
+ admin-state keyword
+ community-entry name string
+ community string
+ description string
+ prefix-list (ipv4-prefix | ipv6-prefix)
+ description string
+ security-entry name string
+ authentication
+ password string
+ protocol keyword
+ description string
+ privacy
+ password string
+ protocol keyword
+ user string
+ security-level keyword
+ network-instance name reference
+ admin-state keyword
+ engine-id string
- error-msg string
+ listen-address (ipv4-address | ipv6-address)
- oper-state keyword
- statistics
- snmp-in-asn-parse-errs number
- snmp-in-bad-community-names number
- snmp-in-bad-community-uses number
- snmp-in-bad-versions number
- snmp-in-gen-errs number
- snmp-in-get-nexts number
- snmp-in-get-requests number
- snmp-in-pkts number
- snmp-in-total-req-vars number
- snmp-invalid-msgs number
- snmp-out-gen-errs number
- snmp-out-get-responses number
- snmp-out-pkts number
- snmp-out-traps number
- snmp-silent-drops number
- snmp-unknown-pdu-handlers number
- snmp-unknown-security-models number
- usm-stats-decryption-errors number
- usm-stats-not-in-time-windows number
- usm-stats-unknown-engine-ids number
- usm-stats-unknown-user-names number
- usm-stats-unsupported-sec-levels number
- usm-stats-wrong-digests number

```

```

+ transport keyword
+ trap-group name string
+ admin-state keyword
+ description string
+ destination name string
+ address (ipv4-address | ipv6-address)
+ admin-state keyword
+ community-entry name string
+ community string
+ description string
+ description string
+ port number
+ security-entry name string
+ authentication
+ password string
+ protocol keyword
+ description string
+ engine-id string
+ privacy
+ password string
+ protocol keyword
+ user string
+ security-level keyword
+ network-instance reference
+ source-address (ipv4-address | ipv6-address)
+ ssh-server name string
+ admin-state keyword
+ allowed-authentication-types keyword
+ authorized-principal-check-tool keyword
- counters
- access-accepts number
- access-rejects number
- last-access-accept string
- last-access-reject string
- credentialz
- host-certificate
- created-on string
- version string
- host-key
- created-on string
- version string
- trusted-user-ca-keys
- created-on string
- version string
+ disable-shell boolean
+ host-key
+ preserve boolean
+ type type keyword
+ certificate string
+ private-key string
- public-key string
+ network-instance reference
- oper-state keyword
+ port number
- protocol-version number
+ rate-limit number
+ revoked-keys string
+ source-address (ipv4-address | ipv6-address)
+ timeout number
+ trust-anchors string
+ use-credentialz boolean
+ sync
+ freq-clock
- active-reference keyword

```

```

- freq-clock-state keyword
- freq-offset decimal-number
+ network-type keyword
+ ql-input-threshold keyword
+ ql-selection boolean
+ revert boolean
- system-ql-value keyword
+ wait-to-restore number
+ freq-references
+ instance instance-number number
+ admin-state keyword
- not-qualified-reason keyword
- oper-state keyword
+ priority number
+ ql-override keyword
- ql-value keyword
- reference-status keyword
+ source
+ gnss
+ interface reference
+ sync0
+ gnss
+ constellation
+ galileo boolean
- gps boolean
+ receiver gnss-id keyword
+ admin-state keyword
- altitude-position decimal-number
+ antenna-cable-delay number
+ elevation-mask-angle number
- gnss-antenna-status keyword
- gnss-date-and-time string
- gnss-firmware string
- gnss-receiver-status string
- gnss-sync-status keyword
- gnss-utc-offset number
- gnss-utc-offset-valid boolean
- latitude-position decimal-number
- longitude-position decimal-number
- number-of-satellites-visible number
- oper-state keyword
- position-valid boolean
- satellites-in-use
- instance instance-number number
- band string
- constellation string
- prn number
- signal-strength number
- number-of-satellites-in-use number
+ one-pps
+ admin-state keyword
+ ptp
+ instance instance-index number
- current-ds
- mean-delay number
- offset-from-master number
- steps-removed number
+ default-ds
+ announce-receipt-timeout number
- clock-identity binary
- clock-quality
- clock-accuracy number
- clock-class number
- offset-scaled-log-variance number

```

```

- current-time
  - date-time string
  - time-nano-seconds number
  - time-seconds number
+ domain-number number
+ instance-enable boolean
+ instance-type keyword
+ local-priority number
+ log-announce-interval number
- number-ports number
+ priority1 number
+ priority2 number
- statistics
  - anno-msg-rx number
  - anno-msg-tx number
  - del-req-msg-rx number
  - del-req-msg-tx number
  - del-resp-msg-rx number
  - del-resp-msg-tx number
  - delay-high-packet-loss number
  - delay-packet-loss number
  - discards
    - alternate-master number
    - bad-domain number
    - other number
    - out-of-sequence number
    - peer-disabled number
  - follow-up-msg-rx number
  - follow-up-msg-tx number
  - multicast-msg-rate
    - anno-msg-rate-rx decimal-number
    - anno-msg-rate-tx decimal-number
    - del-req-msg-rate-rx decimal-number
    - del-req-msg-rate-tx decimal-number
    - del-resp-msg-rate-rx decimal-number
    - del-resp-msg-rate-tx decimal-number
    - follow-up-msg-rate-rx decimal-number
    - follow-up-msg-rate-tx decimal-number
    - other-rate-rx decimal-number
    - signaling-msg-rate-rx decimal-number
    - signaling-msg-rate-tx decimal-number
    - sync-msg-rate-rx decimal-number
    - sync-msg-rate-tx decimal-number
  - other-rx number
  - signaling-msg-rx number
  - signaling-msg-tx number
  - signaling-uni-neg-tlv
    - ack-cancel-anno-rx number
    - ack-cancel-anno-tx number
    - ack-cancel-delay-resp-rx number
    - ack-cancel-delay-resp-tx number
    - ack-cancel-sync-rx number
    - ack-cancel-sync-tx number
    - cancel-anno-rx number
    - cancel-anno-tx number
    - cancel-delay-resp-rx number
    - cancel-delay-resp-tx number
    - cancel-sync-rx number
    - cancel-sync-tx number
    - grant-anno-rx number
    - grant-anno-tx number
    - grant-delay-resp-rx number
    - grant-delay-resp-tx number
    - grant-sync-rx number

```

```

- grant-sync-tx number
- other-tlv number
- reject-anno-rx number
- reject-anno-tx number
- reject-delay-resp-rx number
- reject-delay-resp-tx number
- reject-sync-rx number
- reject-sync-tx number
- request-anno-rx number
- request-anno-tx number
- request-delay-resp-rx number
- request-delay-resp-tx number
- request-sync-rx number
- request-sync-tx number
- sync-high-packet-loss number
- sync-msg-rx number
- sync-msg-tx number
- sync-packet-loss number
- unicast-msg-rate
  - anno-msg-rate-rx decimal-number
  - anno-msg-rate-tx decimal-number
  - del-req-msg-rate-rx decimal-number
  - del-req-msg-rate-tx decimal-number
  - del-resp-msg-rate-rx decimal-number
  - del-resp-msg-rate-tx decimal-number
  - follow-up-msg-rate-rx decimal-number
  - follow-up-msg-rate-tx decimal-number
  - other-rate-rx decimal-number
  - signaling-msg-rate-rx decimal-number
  - signaling-msg-rate-tx decimal-number
  - sync-msg-rate-rx decimal-number
  - sync-msg-rate-tx decimal-number
- time-recovery-engine
  - last-adjustment number
  - last-adjustment-timestamp string
  - recovery-state keyword
  - state-last-changed string
  - statistics
    - delay-too-much-pdv number
    - sync-too-much-pdv number
    - time-in-acquiring number
    - time-in-holdover number
    - time-in-initial number
    - time-in-locked number
  - two-step-flag boolean
- parent-ds
  - grandmaster-clock-quality
    - clock-accuracy number
    - clock-class number
    - offset-scaled-log-variance number
  - grandmaster-identity binary
  - grandmaster-priority1 number
  - grandmaster-priority2 number
  - parent-port-identity
    - clock-identity binary
    - port-number number
  - protocol-address
    - ip
      - ip-address (ipv4-address | ipv6-address)
      - network-instance reference
    - mac-address string
    - network-protocol identityref
+ port-ds-cfg-ip-list port-index number
+ admin-state keyword

```

```

- announce-receipt-timeout number
- best-master boolean
- clock-identity binary
- grandmaster-clock-quality
  - clock-accuracy number
  - clock-class number
  - offset-scaled-log-variance number
- grandmaster-identity binary
- grandmaster-priority1 number
- grandmaster-priority2 number
- last-rx-interface reference
- last-tx-interface reference
+ local-priority number
- log-announce-interval number
- log-min-delay-req-interval number
+ log-sync-interval number
- major-version-number number
- minor-version-number number
- parent-clock boolean
+ peer
+ ip-address (ipv4-address | ipv6-address)
  - network-instance reference
- port-number number
- port-state keyword
- ptp-port-number number
- statistics
  - anno-msg-rx number
  - anno-msg-tx number
  - del-req-msg-rx number
  - del-req-msg-tx number
  - del-resp-msg-rx number
  - del-resp-msg-tx number
  - discards
    - alternate-master number
    - bad-domain number
    - other number
    - out-of-sequence number
    - peer-disabled number
  - follow-up-msg-rx number
  - follow-up-msg-tx number
  - other-rx number
  - signaling-msg-rx number
  - signaling-msg-tx number
  - signaling-uni-neg-tlv
    - ack-cancel-anno-rx number
    - ack-cancel-anno-tx number
    - ack-cancel-delay-resp-rx number
    - ack-cancel-delay-resp-tx number
    - ack-cancel-sync-rx number
    - ack-cancel-sync-tx number
    - cancel-anno-rx number
    - cancel-anno-tx number
    - cancel-delay-resp-rx number
    - cancel-delay-resp-tx number
    - cancel-sync-rx number
    - cancel-sync-tx number
    - grant-anno-rx number
    - grant-anno-tx number
    - grant-delay-resp-rx number
    - grant-delay-resp-tx number
    - grant-sync-rx number
    - grant-sync-tx number
    - other-tlv number
    - reject-anno-rx number

```

- **reject-anno-tx** *number*
- **reject-delay-resp-rx** *number*
- **reject-delay-resp-tx** *number*
- **reject-sync-rx** *number*
- **reject-sync-tx** *number*
- **request-anno-rx** *number*
- **request-anno-tx** *number*
- **request-delay-resp-rx** *number*
- **request-delay-resp-tx** *number*
- **request-sync-rx** *number*
- **request-sync-tx** *number*
- **sync-msg-rx** *number*
- **sync-msg-tx** *number*
- **steps-removed** *number*
- **unicast-negotiation**
  - **rx-announce**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **rx-delay-resp**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **rx-sync**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **tx-announce**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **tx-delay-resp**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **tx-sync**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
- **port-ds-dsc-ip-list** **port-index** *number*
  - **last-rx-interface** *reference*
  - **last-tx-interface** *reference*
  - **log-announce-interval** *number*
  - **log-min-delay-req-interval** *number*
  - **log-sync-interval** *number*
  - **major-version-number** *number*
  - **minor-version-number** *number*
  - **peer**
    - **ip-address** (*ipv4-address* | *ipv6-address*)
    - **network-instance** *reference*
  - **port-state** *keyword*
  - **ptp-port-number** *number*
  - **statistics**
    - **anno-msg-rx** *number*
    - **anno-msg-tx** *number*
    - **del-req-msg-rx** *number*
    - **del-req-msg-tx** *number*
    - **del-resp-msg-rx** *number*



- **del-resp-msg-tx** *number*
- **discards**
  - **alternate-master** *number*
  - **bad-domain** *number*
  - **other** *number*
  - **out-of-sequence** *number*
  - **peer-disabled** *number*
- **follow-up-msg-rx** *number*
- **follow-up-msg-tx** *number*
- **other-rx** *number*
- **signaling-msg-rx** *number*
- **signaling-msg-tx** *number*
- **signaling-uni-neg-tlv**
  - **ack-cancel-anno-rx** *number*
  - **ack-cancel-anno-tx** *number*
  - **ack-cancel-delay-resp-rx** *number*
  - **ack-cancel-delay-resp-tx** *number*
  - **ack-cancel-sync-rx** *number*
  - **ack-cancel-sync-tx** *number*
  - **cancel-anno-rx** *number*
  - **cancel-anno-tx** *number*
  - **cancel-delay-resp-rx** *number*
  - **cancel-delay-resp-tx** *number*
  - **cancel-sync-rx** *number*
  - **cancel-sync-tx** *number*
  - **grant-anno-rx** *number*
  - **grant-anno-tx** *number*
  - **grant-delay-resp-rx** *number*
  - **grant-delay-resp-tx** *number*
  - **grant-sync-rx** *number*
  - **grant-sync-tx** *number*
  - **other-tlv** *number*
  - **reject-anno-rx** *number*
  - **reject-anno-tx** *number*
  - **reject-delay-resp-rx** *number*
  - **reject-delay-resp-tx** *number*
  - **reject-sync-rx** *number*
  - **reject-sync-tx** *number*
  - **request-anno-rx** *number*
  - **request-anno-tx** *number*
  - **request-delay-resp-rx** *number*
  - **request-delay-resp-tx** *number*
  - **request-sync-rx** *number*
  - **request-sync-tx** *number*
- **sync-msg-rx** *number*
- **sync-msg-tx** *number*
- **unicast-negotiation**
  - **rx-announce**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **rx-delay-resp**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **rx-sync**
    - **duration** *number*
    - **log-interval** *number*
    - **state** *keyword*
    - **time-of-last-grant** *string*
  - **tx-announce**
    - **duration** *number*

```

- log-interval number
- state keyword
- time-of-last-grant string
- tx-delay-resp
- duration number
- log-interval number
- state keyword
- time-of-last-grant string
- tx-sync
- duration number
- log-interval number
- state keyword
- time-of-last-grant string
- port-ds-gnss
- best-master boolean
- major-version-number number
- minor-version-number number
- parent-clock boolean
- port-state keyword
- ptp-port-number number
+ port-ds-interface-list port-index number
+ admin-state keyword
- announce-receipt-timeout number
- best-master boolean
+ dest-mac keyword
+ local-priority number
- log-announce-interval number
+ log-min-delay-req-interval number
+ log-sync-interval number
- major-version-number number
+ master-only boolean
- minor-version-number number
- neighbor-count number
- neighbor-list clock-identity binary port-number number
- mac-address string
- parent-clock boolean
- rx-message-rate decimal-number
- parent-clock boolean
- port-state keyword
- ptp-port-number number
+ source
+ interface reference
+ sync0
- statistics
- anno-msg-rx number
- anno-msg-tx number
- del-req-msg-rx number
- del-req-msg-tx number
- del-req-msg-rx number
- del-req-msg-tx number
- del-req-msg-rx number
- del-req-msg-tx number
- discards
- alternate-master number
- bad-domain number
- other number
- out-of-sequence number
- peer-disabled number
- follow-up-msg-rx number
- follow-up-msg-tx number
- other-rx number
- signaling-msg-rx number
- signaling-msg-tx number
- sync-msg-rx number
- sync-msg-tx number
- time-properties-ds

```

```

- current-utc-offset number
- current-utc-offset-valid boolean
- frequency-traceable boolean
- leap59 boolean
- leap61 boolean
- ptp-timescale boolean
- time-source keyword
- time-traceable boolean
+ ptp-profile keyword
+ timing-source-net-inst reference
+ tls
+ server-profile name string
+ authenticate-client boolean
+ certificate string
+ certificate-revocation-list string
- certz
- certificate
- created-on string
- version string
- crl
- created-on string
- version string
- ssl-profile-id string
- trust-anchor
- created-on string
- version string
+ cipher-list identityref
- dynamic boolean
+ key string
+ trust-anchor string
+ use-tpm-devid keyword
+ trace-options keyword
+ utilization
+ resource name identityref
- free-entries number
+ upper-threshold-clear number
+ upper-threshold-set number
- used-entries number
- used-high-watermark number
- used-last-high-watermark-time string
- used-percent number
- used-upper-threshold-exceeded boolean

```

## 11.1 system Descriptions

### system

<b>Description</b>	Enclosing container for system management
<b>Context</b>	<a href="#">system</a>
<b>Tree</b>	<a href="#">system</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### aaa

<b>Description</b>	Top-level container for AAA services
<b>Context</b>	<a href="#">system aaa</a>
<b>Tree</b>	<a href="#">aaa</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### accounting

<b>Description</b>	Top-level container for accounting
<b>Context</b>	<a href="#">system aaa accounting</a>
<b>Tree</b>	<a href="#">accounting</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### accounting-method *reference*

<b>Description</b>	Ordered list of server-groups to use for accounting in the system If accounting fails with one method, the next defined method is tried -- failure of all methods results in the accounting request failing.
<b>Context</b>	<a href="#">system aaa accounting accounting-method <i>reference</i></a>
<b>Tree</b>	<a href="#">accounting-method</a>
<b>Reference</b>	<a href="#">system aaa server-group name <i>string</i></a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## acctz

**Description** Top-level container for acctz accounting

**Context** [system aaa accounting acctz](#)

**Tree** [acctz](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## history-size *number*

**Description** Size of the kept accounting events history

**Context** [system aaa accounting acctz history-size \*number\*](#)

**Tree** [history-size](#)

**Range** 1 to 100000

**Default** 1000

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## event [event-type \*identityref\*](#)

**Description** List of events subject to accounting

**Context** [system aaa accounting event \[event-type \\*identityref\\*\]\(#\)](#)

**Tree** [event](#)

**Configurable** True

**Platforms** Supported on all platforms

## event-type *identityref*

**Description** The type of activity to record at the accounting server

**Context** [system aaa accounting event \[event-type \\*identityref\\*\]\(#\)](#)

<b>Options</b>	<ul style="list-style-type: none"> <li>command Specifies interactive command events for AAA accounting</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **record *identityref***

<b>Description</b>	Type of record to send to the accounting server for this activity type
<b>Context</b>	<a href="#">system aaa accounting event event-type identityref record identityref</a>
<b>Tree</b>	<a href="#">record</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>start-stop Send start and stop records for user activities A start record is sent to the accounting server at the beginning of the activity, and a stop record at the end of the activity</li> <li>stop Send only stop records for user activities A stop record is sent to the accounting server when the user activity completes</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **authentication**

<b>Description</b>	Top-level container for global authentication data
<b>Context</b>	<a href="#">system aaa authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **admin-user**

<b>Description</b>	Enclosing container for admin user
<b>Context</b>	<a href="#">system aaa authentication admin-user</a>
<b>Tree</b>	<a href="#">admin-user</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## credentialz

<b>Description</b>	Information relating to the active user credentials as provided via Credentialz State is provided by the gNSI Credentialz service, and can be changed using the gNSI.Credentialz.RotateAccountCredentials RPC
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz</a>
<b>Tree</b>	<a href="#">credentialz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## authorized-keys

<b>Description</b>	State relating to the Authorized Keys provided via Credentialz
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz authorized-keys</a>
<b>Tree</b>	<a href="#">authorized-keys</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz authorized-keys created-on <i>string</i></a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system</a> <a href="#">aaa</a> <a href="#">authentication</a> <a href="#">admin-user</a> <a href="#">credentialz</a> <a href="#">authorized-keys</a> <a href="#">version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authorized-principals**

<b>Description</b>	State relating to the Authorized Principals provided via Credentialz
<b>Context</b>	<a href="#">system</a> <a href="#">aaa</a> <a href="#">authentication</a> <a href="#">admin-user</a> <a href="#">credentialz</a> <a href="#">authorized-principals</a>
<b>Tree</b>	<a href="#">authorized-principals</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system</a> <a href="#">aaa</a> <a href="#">authentication</a> <a href="#">admin-user</a> <a href="#">credentialz</a> <a href="#">authorized-principals</a> <a href="#">created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz authorized-principals version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **password**

<b>Description</b>	State relating to the Password provided via Credentialz.
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz password</a>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication admin-user credentialz password created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### version *string*

**Description** The version string as provided by the gNSI client at the time of uploading the artifact  
The maps to the version field within a Entity message in the Credentialz protobuf.

**Context** [system aaa authentication admin-user credentialz password version string](#)

**Tree** [version](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-login-attempts *number*

**Description** Number of failed login attempts from the user

**Context** [system aaa authentication admin-user failed-login-attempts number](#)

**Tree** [failed-login-attempts](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### last-failed-login *string*

**Description** The date and time of the last login failure from this user

**Context** [system aaa authentication admin-user last-failed-login string](#)

**Tree** [last-failed-login](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

**last-successful-login** *string*

<b>Description</b>	The date and time of the last successful login from this user
<b>Context</b>	<a href="#">system aaa authentication admin-user last-successful-login</a> <i>string</i>
<b>Tree</b>	<a href="#">last-successful-login</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**lockout**

<b>Description</b>	Information relating to the lockout state of this user
<b>Context</b>	<a href="#">system aaa authentication admin-user lockout</a>
<b>Tree</b>	<a href="#">lockout</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active** *boolean*

<b>Description</b>	Indicates if a lockout is active for the user Lockouts can occur after successive failed logins, and can be cleared by 'tools system aaa authentication user <username> unlock'
<b>Context</b>	<a href="#">system aaa authentication admin-user lockout active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**end** *string*

<b>Description</b>	Indicates the time at which the most recent lockout for this user ended or will end
<b>Context</b>	<a href="#">system aaa authentication admin-user lockout end</a> <i>string</i>
<b>Tree</b>	<a href="#">end</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**start string**

<b>Description</b>	Indicates the time at which the most recent lockout for this user started
<b>Context</b>	<a href="#">system aaa authentication admin-user lockout start string</a>
<b>Tree</b>	<a href="#">start</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**password string**

<b>Description</b>	The admin password, supplied either as cleartext or as a hashed value If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='
<b>Context</b>	<a href="#">system aaa authentication admin-user password string</a>
<b>Tree</b>	<a href="#">password</a>
<b>Default</b>	\$y\$j9T\$pNVjOgcNNGIWjBcdDfK/7.\$lr4uYxsxtqzVj5AGiZvdWJGs.bpLWBJvHON3YgqnC2
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**password-change-required boolean**

<b>Description</b>	Indicates if the user must change their password on next login
<b>Context</b>	<a href="#">system aaa authentication admin-user password-change-required boolean</a>
<b>Tree</b>	<a href="#">password-change-required</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**role reference**

<b>Description</b>	List of roles to assign to this user The most specific rule for a particular role takes precedence. Rules from all user roles are evaluated together, most permissive privilege taking precedence.
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<b>Context</b>	<a href="#">system aaa authentication admin-user role reference</a>
<b>Tree</b>	<a href="#">role</a>
<b>Reference</b>	<a href="#">system aaa authorization role rolename string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	32

### **spiffe-ids** *string*

<b>Description</b>	<p>The SPIFFE ID list for the user, including the spiffe:// URI</p> <p>This list of IDs is evaluated by TLS-consuming servers (e.g. gNMI, JSON-RPC) that use a TLS server-profile with authenticate-client set to true.</p> <p>If a match is found in any incoming offered client certificates, the provider of the certificate is associated with this local user, and given resulting permissions.</p>
<b>Context</b>	<a href="#">system aaa authentication admin-user spiffe-ids string</a>
<b>Tree</b>	<a href="#">spiffe-ids</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ssh-key** *string*

<b>Description</b>	<p>SSH public key(s) for the user</p> <p>If defined, the user may login to the system over SSH with this key. This should use the SSH public authorized key format.</p>
<b>Context</b>	<a href="#">system aaa authentication admin-user ssh-key string</a>
<b>Tree</b>	<a href="#">ssh-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

**ssh-principals** *string*

<b>Description</b>	List of principals to associate with this user  If any of the principals in the list are matched in a SSH client's certificate, and that client's username matches this user, and the certificate is verified, the client will authenticate.
<b>Context</b>	<a href="#">system aaa authentication admin-user ssh-principals</a> <i>string</i>
<b>Tree</b>	<a href="#">ssh-principals</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

**superuser** *boolean*

<b>Description</b>	Indicates if the admin user is a superuser  A superuser is granted implicit authorization to all YANG paths, has the ability to execute all CLI plugins, and by default is permitted to access the device through any interface.  Additionally, users with the superuser attribute are able to execute 'sudo' in bash. A user may also be assigned a role or list of roles, but these are only evaluated for service authorization.
<b>Context</b>	<a href="#">system aaa authentication admin-user superuser</a> <i>boolean</i>
<b>Tree</b>	<a href="#">superuser</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**username** *string*

<b>Description</b>	Assigned username for admin user
<b>Context</b>	<a href="#">system aaa authentication admin-user username</a> <i>string</i>
<b>Tree</b>	<a href="#">username</a>
<b>Default</b>	admin
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**authentication-method** *reference*

<b>Description</b>	Ordered list of server-groups to be used during user authentication If authentication fails with one method, the next defined method is tried -- failure of all methods results in the user being denied access.
<b>Context</b>	<a href="#">system aaa authentication authentication-method reference</a>
<b>Tree</b>	<a href="#">authentication-method</a>
<b>Reference</b>	<a href="#">system aaa server-group name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dynamic-spiffe**

<b>Description</b>	Dynamic SPIFFE settings
<b>Context</b>	<a href="#">system aaa authentication dynamic-spiffe</a>
<b>Tree</b>	<a href="#">dynamic-spiffe</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**allow** *boolean*

<b>Description</b>	Accept clients with SPIFFE ID values that are not configured under any local user  With this behaviour enabled, when a client using a client certificate containing SPIFFE ID connects the system will accept the client. Otherwise the SPIFFE ID must be configured under some local user. Even if enabled, any client using local user's configured SPIFFE ID will use that user's identity in all operations
<b>Context</b>	<a href="#">system aaa authentication dynamic-spiffe allow boolean</a>
<b>Tree</b>	<a href="#">allow</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**role reference**

<b>Description</b>	List of roles to assign to all dynamic SPIFFE clients  Dynamic SPIFFE clients are clients authenticated using a client certificate containing SPIFFE ID value that is not configured under any local user. The most specific rule for a particular role takes precedence. Rules from all user roles are evaluated together, most permissive privilege taking precedence.
<b>Context</b>	<a href="#">system aaa authentication dynamic-spiffe role reference</a>
<b>Tree</b>	<a href="#">role</a>
<b>Reference</b>	<a href="#">system aaa authorization role rolename string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	32

**exit-on-reject boolean**

<b>Description</b>	Enable/disable exit-on-reject behaviour for authentication attempts  With this behaviour enabled, when a reject is received from any server the system will not try further methods, and will reject the user authentication attempt. Default behaviour is to continue trying methods until one accepts the user, or the system runs out of methods to try.
<b>Context</b>	<a href="#">system aaa authentication exit-on-reject boolean</a>
<b>Tree</b>	<a href="#">exit-on-reject</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**idle-timeout number**

<b>Description</b>	Set the idle timeout of all CLI sessions  After the timeout is reached, the session is disconnected from the system.
<b>Context</b>	<a href="#">system aaa authentication idle-timeout number</a>
<b>Tree</b>	<a href="#">idle-timeout</a>
<b>Default</b>	600
<b>Units</b>	seconds



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## linuxadmin-user

<b>Description</b>	Enclosing container for linuxadmin user
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user</a>
<b>Tree</b>	<a href="#">linuxadmin-user</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## credentialz

<b>Description</b>	Information relating to the active user credentials as provided via Credentialz State is provided by the gNSI Credentialz service, and can be changed using the gNSI.Credentialz.RotateAccountCredentials RPC
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz</a>
<b>Tree</b>	<a href="#">credentialz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## authorized-keys

<b>Description</b>	State relating to the Authorized Keys provided via Credentialz
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-keys</a>
<b>Tree</b>	<a href="#">authorized-keys</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-keys created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-keys version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authorized-principals**

<b>Description</b>	State relating to the Authorized Principals provided via Credentialz
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-principals</a>
<b>Tree</b>	<a href="#">authorized-principals</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **created-on** *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-principals created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **version** *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz authorized-principals version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **password**

<b>Description</b>	State relating to the Password provided via Credentialz.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user credentialz password</a>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **created-on string**

**Description** The created on timestamp as provided by the gNSI client at the time of uploading the artifact  
The maps to the created\_on field within a Entity message in the Credentialz protobuf.

**Context** [system aaa authentication linuxadmin-user credentialz password created-on string](#)

**Tree** [created-on](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **version string**

**Description** The version string as provided by the gNSI client at the time of uploading the artifact  
The maps to the version field within a Entity message in the Credentialz protobuf.

**Context** [system aaa authentication linuxadmin-user credentialz password version string](#)

**Tree** [version](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **password string**

**Description** The linuxadmin password, supplied either as cleartext or as a hashed value  
If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed

value, the value should include any '\$' characters, for example '\$6\$c66a15569d3f5952\$kA2WPt9iqR5uMbaCUBNxsjKyXROQFdJtV1HX0CFY9wk7F326/yB3h.dERX9cH7YpeJ1N872hjzTb2tlaZFwwg0'.

<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user password string</a>
<b>Tree</b>	<a href="#">password</a>
<b>Default</b>	\$y\$j9T\$I/vKPXdvWQKKPH8qPzbLs0\$Hz98mmTg.j87QMZITqY2ieGWA3Ed7kzHkp5z6kROEy4
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ssh-key *string*

<b>Description</b>	SSH public key(s) for the user If defined, the user may login to the system over SSH with this key. This should use the SSH public authorized key format.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user ssh-key string</a>
<b>Tree</b>	<a href="#">ssh-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### ssh-principals *string*

<b>Description</b>	List of principals to associate with this user If any of the principals in the list are matched in a SSH client's certificate, and that clients username matches this user, and the certificate is verified, the client will authenticate.
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user ssh-principals string</a>
<b>Tree</b>	<a href="#">ssh-principals</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### username *string*

<b>Description</b>	Assigned username for linuxadmin user
<b>Context</b>	<a href="#">system aaa authentication linuxadmin-user username string</a>

<b>Tree</b>	<a href="#">username</a>
<b>Default</b>	linuxadmin
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## local-linux-users

<b>Description</b>	Enclosing container for local linux users
<b>Context</b>	<a href="#">system aaa authentication local-linux-users</a>
<b>Tree</b>	<a href="#">local-linux-users</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## disable-login *keyword*

<b>Description</b>	disable the logging for all local linux users via remote login or remote login and console
<b>Context</b>	<a href="#">system aaa authentication local-linux-users disable-login keyword</a>
<b>Tree</b>	<a href="#">disable-login</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• remote</li> <li>• remote-and-console</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## password

<b>Description</b>	Top-level container for policies around user passwords
<b>Context</b>	<a href="#">system aaa authentication password</a>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## aging *number*

<b>Description</b>	<p>Expire user passwords after this period</p> <p>A value of 0 means that the user passwords do not expire</p>
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<b>Context</b>	<a href="#">system aaa authentication password aging</a> <i>number</i>
<b>Tree</b>	<a href="#">aging</a>
<b>Range</b>	0 to 500
<b>Default</b>	0
<b>Units</b>	days
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **change-on-first-login** *boolean*

<b>Description</b>	Enable or disable a user being forced to change their password on first time login
<b>Context</b>	<a href="#">system aaa authentication password change-on-first-login</a> <i>boolean</i>
<b>Tree</b>	<a href="#">change-on-first-login</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **complexity-rules**

<b>Description</b>	Top-level container for password complexity rules
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules</a>
<b>Tree</b>	<a href="#">complexity-rules</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **allow-username** *boolean*

<b>Description</b>	Enable or disable using username as part of the user password
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules allow-username</a> <i>boolean</i>
<b>Tree</b>	<a href="#">allow-username</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maximum-length** *number*

<b>Description</b>	The maximum length of the password for local users, including admin and linuxadmin
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules maximum-length number</a>
<b>Tree</b>	<a href="#">maximum-length</a>
<b>Range</b>	1 to 1023
<b>Default</b>	1023
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**minimum-length** *number*

<b>Description</b>	The minimum length of the password for local users, including admin and linuxadmin
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules minimum-length number</a>
<b>Tree</b>	<a href="#">minimum-length</a>
<b>Range</b>	1 to 12
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**minimum-lowercase** *number*

<b>Description</b>	The minimum lowercase characters from (a-z) that the user password must include  A value of 0 results in no minimum-lowercase being enforced.
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules minimum-lowercase number</a>
<b>Tree</b>	<a href="#">minimum-lowercase</a>
<b>Range</b>	0 to 10
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**minimum-numeric** *number*

<b>Description</b>	The minimum numeric digits that the user password must include A value of 0 results in no minimum-numeric being enforced.
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules minimum-numeric number</a>
<b>Tree</b>	<a href="#">minimum-numeric</a>
<b>Range</b>	0 to 10
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**minimum-special-character** *number*

<b>Description</b>	The minimum special characters that the user password must include A value of 0 results in no minimum-special-character being enforced.
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules minimum-special-character number</a>
<b>Tree</b>	<a href="#">minimum-special-character</a>
<b>Range</b>	0 to 10
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**minimum-uppercase** *number*

<b>Description</b>	The minimum uppercase characters from (A-Z) that the user password must include A value of 0 results in no minimum-uppercase being enforced.
<b>Context</b>	<a href="#">system aaa authentication password complexity-rules minimum-uppercase number</a>
<b>Tree</b>	<a href="#">minimum-uppercase</a>
<b>Range</b>	0 to 10
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**hash-method** *keyword*

<b>Description</b>	The hash algorithm for the passwords entered as plain text  If no value is configured, then Yescrypt will be used as the hash algorithm unless overridden for specific leafs using the srl_nokia-extensions:hash-algorithm yang extension. The Argon2 (ar2) hash algorithm is not supported for the linuxadmin user and if selected then the linuxadmin password will be hashed using Yescrypt.
<b>Context</b>	<a href="#">system aaa authentication password hash-method keyword</a>
<b>Tree</b>	<a href="#">hash-method</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ar2 The Argon2 password hashing algorithm</li> <li>• sha2 The SHA512 password hashing algorithm</li> <li>• yescrypt The Yescrypt password hashing algorithm</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**history** *number*

<b>Description</b>	Defines how many previous passwords a new password is matched against, such that a new password can't be one of the previous n passwords
<b>Context</b>	<a href="#">system aaa authentication password history number</a>
<b>Tree</b>	<a href="#">history</a>
<b>Range</b>	0 to 20
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lockout-policy**

<b>Description</b>	Top-level container for lockout policy
<b>Context</b>	<a href="#">system aaa authentication password lockout-policy</a>
<b>Tree</b>	<a href="#">lockout-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**attempts** *number*

<b>Description</b>	The number of failed login attempts that will lock the account A value of 0 means unlimited number of failed login attempts is allowed
<b>Context</b>	<a href="#">system aaa authentication password lockout-policy attempts</a> <i>number</i>
<b>Tree</b>	<a href="#">attempts</a>
<b>Range</b>	0 to 64
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**lockout** *number*

<b>Description</b>	The time duration in minutes the user account will be locked out A value of 0 means that the user account will be locked out/disabled indefinitely
<b>Context</b>	<a href="#">system aaa authentication password lockout-policy lockout</a> <i>number</i>
<b>Tree</b>	<a href="#">lockout</a>
<b>Range</b>	0 to 1440
<b>Default</b>	15
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**time** *number*

<b>Description</b>	The time period in minutes within which the failed login attempts occur
<b>Context</b>	<a href="#">system aaa authentication password lockout-policy time</a> <i>number</i>
<b>Tree</b>	<a href="#">time</a>
<b>Range</b>	0 to 1440
<b>Default</b>	1
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**require-ntp-sync** *boolean*

<b>Description</b>	Enable or disable dependence of password aging and user lockout on NTP sync status
<b>Context</b>	<a href="#">system aaa authentication password require-ntp-sync</a> <i>boolean</i>
<b>Tree</b>	<a href="#">require-ntp-sync</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**session id** *number*

<b>Description</b>	List of active sessions in the system
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	System generated session ID
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**authentication-method** *string*

<b>Description</b>	Authentication method that authorized the user (the server-group name or local)
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i> <a href="#">authentication-method</a> <i>string</i>
<b>Tree</b>	<a href="#">authentication-method</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**login-time** *string*

<b>Description</b>	Time the user logged in
<b>Context</b>	<a href="#">system aaa authentication session id number login-time string</a>
<b>Tree</b>	<a href="#">login-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**network-instance** *string*

<b>Description</b>	Network instance
<b>Context</b>	<a href="#">system aaa authentication session id number network-instance string</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**priv-lvl** *number*

<b>Description</b>	TACACS+ authorization priv-lvl (if TACACS+ authorization is enabled)
<b>Context</b>	<a href="#">system aaa authentication session id number priv-lvl number</a>
<b>Tree</b>	<a href="#">priv-lvl</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**remote-host** *string*

<b>Description</b>	Remote host of the session
<b>Context</b>	<a href="#">system aaa authentication session id number remote-host string</a>
<b>Tree</b>	<a href="#">remote-host</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**role** *string*

<b>Description</b>	List of roles assigned to this user
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<b>Context</b>	<a href="#">system aaa authentication session id number role string</a>
<b>Tree</b>	<a href="#">role</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**service-name string**

<b>Description</b>	Service name that called login for the session
<b>Context</b>	<a href="#">system aaa authentication session id number service-name string</a>
<b>Tree</b>	<a href="#">service-name</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**spiffe-id string**

<b>Description</b>	SPIFFE ID linked to the session
<b>Context</b>	<a href="#">system aaa authentication session id number spiffe-id string</a>
<b>Tree</b>	<a href="#">spiffe-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tty-name string**

<b>Description</b>	Terminal type
<b>Context</b>	<a href="#">system aaa authentication session id number tty-name string</a>
<b>Tree</b>	<a href="#">tty-name</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**username string**

<b>Description</b>	Username linked to the session
<b>Context</b>	<a href="#">system aaa authentication session id number username string</a>
<b>Tree</b>	<a href="#">username</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**user** *username string*

<b>Description</b>	List of local users configured on the system
<b>Context</b>	<a href="#">system aaa authentication user username string</a>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	128

**username** *string*

<b>Description</b>	Assigned username for this user
<b>Context</b>	<a href="#">system aaa authentication user username string</a>
<b>String Length</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**credentialz**

<b>Description</b>	Information relating to the active user credentials as provided via Credentialz State is provided by the gNSI Credentialz service, and can be changed using the gNSI.Credentialz.RotateAccountCredentials RPC
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz</a>
<b>Tree</b>	<a href="#">credentialz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authorized-keys**

<b>Description</b>	State relating to the Authorized Keys provided via Credentialz
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-keys</a>

<b>Tree</b>	<a href="#">authorized-keys</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-keys created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-keys version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## authorized-principals

<b>Description</b>	State relating to the Authorized Principals provided via Credentialz
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-principals</a>
<b>Tree</b>	<a href="#">authorized-principals</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-principals created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username string credentialz authorized-principals version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## password

<b>Description</b>	State relating to the Password provided via Credentialz.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">credentialz password</a>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">credentialz password</a> <a href="#">created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">credentialz password</a> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### failed-login-attempts *number*

**Description** Number of failed login attempts from the user

**Context** [system aaa authentication user username](#) *string* [failed-login-attempts](#) *number*

**Tree** [failed-login-attempts](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### last-failed-login *string*

**Description** The date and time of the last login failure from this user

**Context** [system aaa authentication user username](#) *string* [last-failed-login](#) *string*

**Tree** [last-failed-login](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### last-successful-login *string*

**Description** The date and time of the last successful login from this user

**Context** [system aaa authentication user username](#) *string* [last-successful-login](#) *string*

**Tree** [last-successful-login](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### lockout

**Description** Information relating to the lockout state of this user

**Context** [system aaa authentication user username](#) *string* [lockout](#)

<b>Tree</b>	<a href="#">lockout</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active** *boolean*

<b>Description</b>	Indicates if a lockout is active for the user Lockouts can occur after successive failed logins, and can be cleared by 'tools system aaa authentication user <username> unlock'
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">lockout active</a> <i>boolean</i>
<b>Tree</b>	<a href="#">active</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**end** *string*

<b>Description</b>	Indicates the time at which the most recent lockout for this user ended or will end
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">lockout end</a> <i>string</i>
<b>Tree</b>	<a href="#">end</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**start** *string*

<b>Description</b>	Indicates the time at which the most recent lockout for this user started
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">lockout start</a> <i>string</i>
<b>Tree</b>	<a href="#">start</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**password** *string*

<b>Description</b>	The user password, supplied either as cleartext or as a hashed value
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If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='.

<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string password string</i>
<b>Tree</b>	<a href="#">password</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **password-change-required** *boolean*

<b>Description</b>	Indicates if the user must change their password on next login
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string password-change-required boolean</i>
<b>Tree</b>	<a href="#">password-change-required</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **role** *reference*

<b>Description</b>	List of roles to assign to this user  The most specific rule for a particular role takes precedence. Rules from all user roles are evaluated together, most permissive privilege taking precedence.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string role reference</i>
<b>Tree</b>	<a href="#">role</a>
<b>Reference</b>	<a href="#">system aaa authorization role rolename</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### **spiffe-ids** *string*

<b>Description</b>	The SPIFFE ID list for the user, including the spiffe:// URI  This list of IDs is evaluated by TLS-consuming servers (e.g. gNMI, JSON-RPC) that use a TLS server-profile with authenticate-client set to true.
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If a match is found in any incoming offered client certificates, the provider of the certificate is associated with this local user, and given resulting permissions.

<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">spiffe-ids</a> <i>string</i>
<b>Tree</b>	<a href="#">spiffe-ids</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ssh-key** *string*

<b>Description</b>	SSH public key(s) for the user  If defined, the user may login to the system over SSH with this key. This should use the SSH public authorized key format.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">ssh-key</a> <i>string</i>
<b>Tree</b>	<a href="#">ssh-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### **ssh-principals** *string*

<b>Description</b>	List of principals to associate with this user  If any of the principals in the list are matched in a SSH client's certificate, and that clients username matches this user, and the certificate is verified, the client will authenticate.
<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">ssh-principals</a> <i>string</i>
<b>Tree</b>	<a href="#">ssh-principals</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### **superuser** *boolean*

<b>Description</b>	Indicates that this user is a superuser
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A superuser is granted implicit authorization to all YANG paths, has the ability to execute all CLI plugins, and by default is permitted to access the device through any interface.

Additionally, users with the superuser attribute are able to execute 'sudo' in bash. A user may also be assigned a role or list of roles, but these are only evaluated for service authorization.

<b>Context</b>	<a href="#">system aaa authentication user username</a> <i>string</i> <a href="#">superuser</a> <i>boolean</i>
<b>Tree</b>	<a href="#">superuser</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## authorization

<b>Description</b>	Top-level container for authorization configuration and operational state data
<b>Context</b>	<a href="#">system aaa authorization</a>
<b>Tree</b>	<a href="#">authorization</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## authz-policy

<b>Description</b>	Information relating to the active gRPC authorization policy This policy is provided by the gNSI gRPC service, and can be changed using the gNSI.Authz.Rotate RPC
<b>Context</b>	<a href="#">system aaa authorization authz-policy</a>
<b>Tree</b>	<a href="#">authz-policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## counters

<b>Description</b>	A collection of counters collected by the gNSI.authz module.
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<b>Context</b>	<a href="#">system aaa authorization authz-policy counters</a>
<b>Tree</b>	<a href="#">counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rpc name string**

<b>Description</b>	A collection of counters collected by the gNSI.authz module for a RPC identified by the `name`.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string</a>
<b>Tree</b>	<a href="#">rpc</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name string**

<b>Description</b>	The name of the RPC the counters were collected for.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**access-accepts number**

<b>Description</b>	The total number of times the gNSI.authz module allowed access to a RPC.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string access-accepts number</a>
<b>Tree</b>	<a href="#">access-accepts</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### access-rejects *number*

<b>Description</b>	The total number of times the gNSI.authz module denied access to a RPC.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string access-rejects number</a>
<b>Tree</b>	<a href="#">access-rejects</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-access-accept *string*

<b>Description</b>	A timestamp of the last time the gNSI.authz allowed access to a RPC.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string last-access-accept string</a>
<b>Tree</b>	<a href="#">last-access-accept</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-access-reject *string*

<b>Description</b>	A timestamp of the last time the gNSI.authz denied access to a RPC.
<b>Context</b>	<a href="#">system aaa authorization authz-policy counters rpc name string last-access-reject string</a>
<b>Tree</b>	<a href="#">last-access-reject</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy  This maps to the created_on field within a UploadRequest message in the Authz protobuf.
<b>Context</b>	<a href="#">system aaa authorization authz-policy created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy string**

<b>Description</b>	The policy definition  This JSON string contains the full gRPC authorization rules conforming to the gRPC authorization policy schema.  This maps to the policy field within a UploadRequest message in the Authz protobuf.
<b>Context</b>	<a href="#">system aaa authorization authz-policy policy string</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the policy  The maps to the version field within a UploadRequest message in the Authz protobuf.
<b>Context</b>	<a href="#">system aaa authorization authz-policy version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **role** *rolename string*

**Description** List of local roles configured on the system

**Context** [system aaa authorization role rolename string](#)

**Tree** [role](#)

**Configurable** True

**Platforms** Supported on all platforms

### **rolename** *string*

**Description** Assigned rolename for this role

**Context** [system aaa authorization role rolename string](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** Supported on all platforms

### **cli**

**Description** Top-level container for cli plugin configuration

**Context** [system aaa authorization role rolename string cli](#)

**Tree** [cli](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **allow-command-list** *string*

**Description** List of cli commands that are allowed for this role

Python style regular expressions are supported. Every item is left anchored (it matches from the beginning of line). Empty allow-command-list means anything that is not in deny-command-list is allowed. If both lists are empty then everything is allowed.

<b>Context</b>	<a href="#">system aaa authorization role rolename string cli allow-command-list string</a>
<b>Tree</b>	<a href="#">allow-command-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	100

### deny-command-list *string*

<b>Description</b>	List of cli commands that are denied for this role  Python style regular expressions are supported. Every item is left anchored (it matches from the beginning of line). Empty deny-command-list means anything that is not in allow-command-list is denied. If both lists are empty then everything is allowed.
<b>Context</b>	<a href="#">system aaa authorization role rolename string cli deny-command-list string</a>
<b>Tree</b>	<a href="#">deny-command-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	100

### load-global-plugins *boolean*

<b>Description</b>	Specifies whether cli should load plugins from global plugin directory (from /etc/opt/srlinux/cli/plugins/).
<b>Context</b>	<a href="#">system aaa authorization role rolename string cli load-global-plugins boolean</a>
<b>Tree</b>	<a href="#">load-global-plugins</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**load-user-plugins** *boolean*

<b>Description</b>	Specifies whether cli should load plugins from user home directory (from ~/cli/plugins/).
<b>Context</b>	<a href="#">system aaa authorization role rolename</a> <i>string cli load-user-plugins boolean</i>
<b>Tree</b>	<a href="#">load-user-plugins</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**netconf**

<b>Description</b>	Top-level container for netconf plugin configuration
<b>Context</b>	<a href="#">system aaa authorization role rolename</a> <i>string netconf</i>
<b>Tree</b>	<a href="#">netconf</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**allowed-operations** *keyword*

<b>Description</b>	List of netconf operation, that are allowed for this role. Rest of the operations are denied.
<b>Context</b>	<a href="#">system aaa authorization role rolename</a> <i>string netconf allowed-operations keyword</i>
<b>Tree</b>	<a href="#">allowed-operations</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• action</li> <li>• cancel-commit</li> <li>• close-session</li> <li>• commit</li> <li>• copy-config</li> <li>• delete-config</li> <li>• discard-changes</li> </ul>

- edit-config
- edit-data
- get
- get-config
- get-data
- get-schema
- kill-session
- lock
- unlock
- validate

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**services** *keyword***Description**

Services that members of this role are authorized for

Services are additive, if a user is a member of multiple roles, the available services are merged.

**Context**

[system aaa authorization role rolename](#) *string services keyword*

**Tree**

[services](#)

**Options**

- cli
- gnmi
- gnoi
- gnsi
- gribi
- netconf
- p4rt
- json-rpc
- ftp
- grpc-reflection

**Configurable**

True

**Platforms**

Supported on all platforms

**superuser** *boolean*

<b>Description</b>	Indicates if users with this role are given superuser  A superuser is granted implicit authorization to all YANG paths, has the ability to execute all CLI plugins, and by default is permitted to access the device through any interface.  Additionally, users with the superuser attribute are able to execute 'sudo' in bash. A user may also be assigned a role or list of roles, but these are only evaluated for service authorization.
<b>Context</b>	<a href="#">system aaa authorization role rolename string superuser boolean</a>
<b>Tree</b>	<a href="#">superuser</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tacacs**

<b>Description</b>	Top-level container for configuration relating to TACACS+ interworking with roles
<b>Context</b>	<a href="#">system aaa authorization role rolename string tacacs</a>
<b>Tree</b>	<a href="#">tacacs</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**priv-lvl** *number*

<b>Description</b>	The TACACS+ priv-lvl to map to this role  All roles matching each specific priv-lvl, and their lessers are merged together to create the final ruleset applied to the user.
<b>Context</b>	<a href="#">system aaa authorization role rolename string tacacs priv-lvl number</a>
<b>Tree</b>	<a href="#">priv-lvl</a>
<b>Range</b>	0 to 15
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**server-group** *name string*

<b>Description</b>	List of AAA server-groups in the system Each server group specifies a type, of which all servers must use. If using the 'local' type, then no servers may be specified.
<b>Context</b>	<a href="#">system aaa server-group name string</a>
<b>Tree</b>	<a href="#">server-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	3

**name** *string*

<b>Description</b>	User defined name for the server group
<b>Context</b>	<a href="#">system aaa server-group name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**priv-lvl-authorization** *boolean*

<b>Description</b>	Use TACACS+ priv-lvl based authorization If false, then authorization is skipped for TACACS+ users granting full admin access for those users.
<b>Context</b>	<a href="#">system aaa server-group name string priv-lvl-authorization boolean</a>
<b>Tree</b>	<a href="#">priv-lvl-authorization</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**server** *address (ipv4-address | ipv6-address)*

<b>Description</b>	List of AAA servers to use within this server-group Servers are tried in a round-robin fashion, with the first server always being tried if it is operationally available
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<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	5

### **address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Address used to reach the server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **name** *string*

<b>Description</b>	User defined name assigned to the server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">name</a> <i>string</i>
<b>Tree</b>	<a href="#">name</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **network-instance** *reference*

<b>Description</b>	Reference to a configured network-instance used for reachability to the server  This network-instance must already exist in the system, and different servers within the same server-group may use difference network-instances for connectivity.
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **oper-state** keyword

<b>Description</b>	Details the operational state of the server  A server is defined as being down if it fails to respond before the timeout period, or if a path towards the server is not available.
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting  This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting</li></ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## radius

<b>Description</b>	Top-level container for RADIUS server data
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) radius</a>
<b>Tree</b>	<a href="#">radius</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## acct-port *number*

<b>Description</b>	Port number for accounting requests
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) radius acct-port number</a>
<b>Tree</b>	<a href="#">acct-port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	1813
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## auth-port *number*

<b>Description</b>	Port number for authentication requests
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) radius auth-port number</a>
<b>Tree</b>	<a href="#">auth-port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	1812
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**retransmit-attempts** *number*

<b>Description</b>	Number of times the system may send a request to the unresponsive server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">radius retransmit-attempts</a> <i>number</i>
<b>Tree</b>	<a href="#">retransmit-attempts</a>
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**secret-key** *string*

<b>Description</b>	The unencrypted shared key used between the system and server, up to 64 characters cleartext
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">radius secret-key</a> <i>string</i>
<b>Tree</b>	<a href="#">secret-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source IP address to use in messages to the RADIUS server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">radius source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enclosing container for server statistics
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **accounting-connection-failures** *number*

<b>Description</b>	Number of accounting connection failures
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics accounting-connection-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">accounting-connection-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **accounting-rejects** *number*

<b>Description</b>	Number of accounting rejections
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics accounting-rejects</a> <i>number</i>
<b>Tree</b>	<a href="#">accounting-rejects</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **accounting-success** *number*

<b>Description</b>	Number of accounting successes
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics accounting-success</a> <i>number</i>
<b>Tree</b>	<a href="#">accounting-success</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **authorization-connection-failures** *number*

<b>Description</b>	Number of authorization connection failures
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<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) statistics authorization-connection-failures number</a>
<b>Tree</b>	<a href="#">authorization-connection-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **authorization-rejects** *number*

<b>Description</b>	Number of authorization rejections
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) statistics authorization-rejects number</a>
<b>Tree</b>	<a href="#">authorization-rejects</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **authorization-success** *number*

<b>Description</b>	Number of authorization successes
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) statistics authorization-success number</a>
<b>Tree</b>	<a href="#">authorization-success</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **login-connection-failures** *number*

<b>Description</b>	Number of login connection failures
<b>Context</b>	<a href="#">system aaa server-group name string server address (ipv4-address   ipv6-address) statistics login-connection-failures number</a>
<b>Tree</b>	<a href="#">login-connection-failures</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**login-rejects** *number*

<b>Description</b>	Number of login rejections
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics login-rejects</a> <i>number</i>
<b>Tree</b>	<a href="#">login-rejects</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**login-success** *number*

<b>Description</b>	Number of login successes
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">statistics login-success</a> <i>number</i>
<b>Tree</b>	<a href="#">login-success</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tacacs**

<b>Description</b>	Top-level container for TACACS+ server data
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">tacacs</a>
<b>Tree</b>	<a href="#">tacacs</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**port** *number*

<b>Description</b>	The port number on which to contact the TACACS+ server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">tacacs port</a> <i>number</i>
<b>Tree</b>	<a href="#">port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	49

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**secret-key** *string*

<b>Description</b>	The unencrypted shared key used between the system and server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">tacacs secret-key</a> <i>string</i>
<b>Tree</b>	<a href="#">secret-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source address for TACACS to use for messages sent to a remote server
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">server address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">tacacs source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout** *number*

<b>Description</b>	Set the timeout in seconds on responses from servers in this group
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 3600
<b>Default</b>	10
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**type** *identityref*

<b>Description</b>	AAA server type -- all servers in the group must be of this type
<b>Context</b>	<a href="#">system aaa server-group name</a> <i>string</i> <a href="#">type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• tacacs Specifies servers using the TACACS+ protocol Terminal Access Controller Access Control System (TACACS+)</li> <li>• radius Specifies servers using RADIUS protocol Remote Authentication Dial In User Service (RADIUS) AAA server</li> <li>• local Specifies using Linux local methods This type cannot be combined with a server address</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**app-management**

<b>Description</b>	Top-level container for application configuration and state
<b>Context</b>	<a href="#">system app-management</a>
<b>Tree</b>	<a href="#">app-management</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**application** *name string*

<b>Description</b>	List of all applications managed by the application manager
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i>
<b>Tree</b>	<a href="#">application</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Unique name of this application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**author** *string*

<b>Description</b>	The author of the application
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">author</a> <i>string</i>
<b>Tree</b>	<a href="#">author</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**cgroup** *string*

<b>Description</b>	Cgroup in with this application is started
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">cgroup</a> <i>string</i>
<b>Tree</b>	<a href="#">cgroup</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failure-action** *string*

<b>Description</b>	The action taken after 'failure-threshold' failures within 'failure-window' This action can be to reboot the system, wait forever, or wait for a predefined number of seconds
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">failure-action</a> <i>string</i>
<b>Tree</b>	<a href="#">failure-action</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failure-threshold** *number*

<b>Description</b>	How many restarts within 'failure-window' are required to trigger the failure action Setting this value to 0 will result in no action taking place on application restarts
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">failure-threshold</a> <i>number</i>
<b>Tree</b>	<a href="#">failure-threshold</a>
<b>Range</b>	0 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failure-window** *number*

<b>Description</b>	Sliding window in seconds, over which to count restarts towards failure-threshold
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">failure-window</a> <i>number</i>
<b>Tree</b>	<a href="#">failure-window</a>
<b>Range</b>	300 to 86400
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-change** *string*

<b>Description</b>	Date and time the application instance last changed state
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-start-type** *keyword*

<b>Description</b>	Indicates the type of the most recent start or restart of this application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">last-start-type</a> <i>keyword</i>

<b>Tree</b>	<a href="#">last-start-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>warm           <p>A warm start indicates that the application will leave state in IDB during a restart, and recover it post restart</p> <p>This type results in less disruption to surrounding applications and functionality.</p> </li> <li>cold           <p>A cold start indicates that the application will not leave state in IDB during a restart</p> <p>This type is equivalent to a normal application restart, i.e. one where the application's state is purged from the system during the restart, and recreated after.</p> </li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **launch-command** *string*

<b>Description</b>	The command used to launch the application
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">launch-command</a> <i>string</i>
<b>Tree</b>	<a href="#">launch-command</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **oom-score-adj** *number*

<b>Description</b>	OOM score adj value set for this application
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">oom-score-adj</a> <i>number</i>
<b>Tree</b>	<a href="#">oom-score-adj</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **path** *string*

<b>Description</b>	The directory where the application can be found
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">path</a> <i>string</i>
<b>Tree</b>	<a href="#">path</a>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **pid number**

**Description** Process ID of this application instance

**Context** [system app-management application name](#) *string pid number*

**Tree** [pid](#)

**Configurable** False

**Platforms** Supported on all platforms

### **restricted-operations keyword**

**Description** The operations that may not be manually performed on this application

**Context** [system app-management application name](#) *string restricted-operations keyword*

**Tree** [restricted-operations](#)

**Options**

- restart  
This application may not be restarted manually
- stop  
This application may not be stopped manually
- start  
This application may not be started manually
- reload  
This application may not be reloaded manually
- quit  
This application may not be terminated manually
- kill  
This application may not be terminated ungracefully manually

**Configurable** False

**Platforms** Supported on all platforms

### **search-command string**

**Description** The command used to search for the applications liveness

**Context** [system app-management application name](#) *string search-command string*

**Tree** [search-command](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### state keyword

<b>Description</b>	Current state of this application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string state keyword</i>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• running Application instance is running This is the normal, active state of an application</li> <li>• waiting-for-config Application instance is loaded, but has no configuration This state requires wait-for-config true within the applications YAML configuration. This results in the application being loaded into app-mgr, but not starting until the system receives configuration for it</li> <li>• error The application has not started successfully, or has failed This state can be caused by an application hitting the restart backoff, or an application failing to start following triggering a system reboot</li> <li>• starting The application has been asked to start All applications enter this state after initial execution, after which application manager will wait five seconds before checking their status. IDB connected applications may announce their state before this five second window has passed, resulting in them transitioning from this state faster than PID-monitored applications.</li> <li>• stopped The application is not running This state is most likely caused by an operator action</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	Top-level container for application statistics
<b>Context</b>	<a href="#">system app-management application name</a> <i>string statistics</i>
<b>Tree</b>	<a href="#">statistics</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**restart-count** *number*

<b>Description</b>	The number of times this application instance has restarted
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">statistics restart-count</a> <i>number</i>
<b>Tree</b>	<a href="#">restart-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**supported-restart-types** *keyword*

<b>Description</b>	Indicates the supported restart types for this application
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">supported-restart-types</a> <i>keyword</i>
<b>Tree</b>	<a href="#">supported-restart-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• warm A warm start indicates that the application will leave state in IDB during a restart, and recover it post restart This type results in less disruption to surrounding applications and functionality.</li> <li>• cold A cold start indicates that the application will not leave state in IDB during a restart This type is equivalent to a normal application restart, i.e. one where the application's state is purged from the system during the restart, and recreated after.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**version** *string*

<b>Description</b>	The version of the application
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## yang

<b>Description</b>	Top-level container for application state related to YANG
<b>Context</b>	<a href="#">system app-management application name string yang</a>
<b>Tree</b>	<a href="#">yang</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## modules *string*

<b>Description</b>	YANG module names used by this application instance
<b>Context</b>	<a href="#">system app-management application name string yang modules string</a>
<b>Tree</b>	<a href="#">modules</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## source-directories *string*

<b>Description</b>	Source directories searched for YANG modules to load These directories are used to load modules indicated in the modules leaf, and any modules imported/included within them
<b>Context</b>	<a href="#">system app-management application name string yang source-directories string</a>
<b>Tree</b>	<a href="#">source-directories</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## authentication

<b>Description</b>	Container for protocol authentication options available system wide
<b>Context</b>	<a href="#">system authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True



**Platforms** Supported on all platforms

### keychain *name string*

**Description** List of system keychains

**Context** [system authentication keychain name string](#)

**Tree** [keychain](#)

**Configurable** True

**Platforms** Supported on all platforms

**Max. Elements** 1024

### name *string*

**Description** The user configured name for the keychain

**Context** [system authentication keychain name string](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** Supported on all platforms

### active-key-for-send (*keyword | reference*)

**Description** Provides the key index of the currently active Keychain key

**Context** [system authentication keychain name string active-key-for-send \(keyword | reference\)](#)

**Tree** [active-key-for-send](#)

**Options**

- none

No send key is usable

**Reference** [system authentication keychain name string key index number](#)

**Configurable** False

**Platforms** Supported on all platforms

### admin-state *keyword*

**Description** When set to disable, the keychain is inactive

When a protocol refers to a keychain that is inactive, no authentication data is added to the outbound messages and/or all inbound messages with authentication data are dropped, depending on the context.

A keychain is operationally disabled in a particular direction (send/receive) if:

<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **description** *string*

<b>Description</b>	The user configured description for the keychain
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **expired** *boolean*

<b>Description</b>	The value of this object indicates whether the keychain is expired Expired can mean past end-time or prior to start-time.
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">expired</a> <i>boolean</i>
<b>Tree</b>	<a href="#">expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **key** *index number*

<b>Description</b>	List of keys in the keychain
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key</a> <i>index number</i>
<b>Tree</b>	<a href="#">key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**index number**

<b>Description</b>	Each key in a keychain requires a unique identifier, the index value specifies this identifier
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**algorithm keyword**

<b>Description</b>	The cryptographic algorithm used with the keying material to secure the messages
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index number</a> <a href="#">algorithm keyword</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• cleartext The authentication-key is encoded in plaintext</li> <li>• md5 The authentication-key is used to generate an MD5 digest (RFC 1321)</li> <li>• hmac-md5 The authentication-key is used to generate a 16-byte (128 bit) MD5 digest using the HMAC algorithm (RFC 2104)</li> <li>• hmac-sha-1 The authentication-key is used to generate a SHA1 digest using the HMAC algorithm (RFC 2104)</li> <li>• hmac-sha-256 The authentication-key is used to generate a SHA2 digest using the HMAC algorithm (RFC 2104) The SHA-256 variant of SHA2 produces an output of 32 bytes (256 bits)</li> <li>• aes-128-cmac The authentication-key is used with the AES-128 encryption algorithm to generate a cipher MAC (RFC 4493)</li> <li>• aes-256-cmac The authentication-key is used with the AES-256 encryption algorithm to generate a cipher MAC (RFC 4493).</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authentication-key** *string*

<b>Description</b>	The secret key to use for authentication
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index number</a> <a href="#">authentication-key</a> <i>string</i>
<b>Tree</b>	<a href="#">authentication-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**receive-lifetime**

<b>Description</b>	Enter the receive-lifetime context
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index number</a> <a href="#">receive-lifetime</a>
<b>Tree</b>	<a href="#">receive-lifetime</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**end-time** (*keyword* | *date-and-time-delta*)

<b>Description</b>	The time at which the key becomes invalid for use in the receive direction The default is forever.
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index number</a> <a href="#">receive-lifetime</a> <a href="#">end-time</a> ( <i>keyword</i>   <i>date-and-time-delta</i> )
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Options</b>	<ul style="list-style-type: none"> <li>• forever Receive key does not expire (equivalent to infinite tolerance)</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**start-time** *string*

<b>Description</b>	The time at which the key becomes valid for use in the receive direction If send-and-receive is true, this value is ignored. If send-and-receive is false the default is the Unix Epoch (Jan 1, 1970 00:00:00 UTC).
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If there are multiple keys in the keychain the one used for checking received authentication information is the key with the most recent receive-lifetime start-time that is earlier than the current date and time and that has not exceeded its receive-lifetime end-time by more than 'tolerance' seconds

<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index</a> <i>number</i> <a href="#">receive-lifetime start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### send-lifetime

<b>Description</b>	Specifies the lifetime of the key for sending authentication information to the peer
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index</a> <i>number</i> <a href="#">send-lifetime</a>
<b>Tree</b>	<a href="#">send-lifetime</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### send-and-receive *boolean*

<b>Description</b>	When this is set to true (the default value), the specified start-time also applies to the receive direction  When set to false, router uses the specific start-time for the receive direction (asymmetric mode).
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index</a> <i>number</i> <a href="#">send-lifetime</a> <a href="#">send-and-receive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">send-and-receive</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### start-time *string*

<b>Description</b>	The time at which the key becomes valid for use in the send direction The default is the Unix Epoch (Jan 1, 1970 00:00:00 UTC).  If there are multiple keys in the keychain the one used for sending authentication information is the key with the most recent send-lifetime start-time that is earlier than the current date and time
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<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">key index</a> <i>number</i> <a href="#">send-lifetime</a> <a href="#">start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tolerance** *number*

<b>Description</b>	Tolerance for receive keys If tolerance is Z then all receive keys remain valid up to the configured/ applicable end-time plus an additional Z seconds.
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">tolerance</a> <i>number</i>
<b>Tree</b>	<a href="#">tolerance</a>
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Specifies the intended use of the keychain The type constrains the set of crypto algorithms that are available to use with each key in the keychain. It is also used to ensure that this keychain is only used by protocols for which it is intended.
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• tcp-md5 Keychain intended to be used for TCP-MD5 authentication</li> <li>• isis Keychain intended to be used for authentication of IS-IS PDUs</li> <li>• ospf Keychain intended to be used for authentication of OSPFv2 messages</li> <li>• tcp-ao Keychain intended to be used for TCP-AO authentication</li> <li>• vrrp Keychain intended to be used for authentication of VRRPv2 messages</li> </ul>

- macsec  
Keychain intended to be used for key wrapping of SAK in a mka messages.

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **usable** *boolean*

<b>Description</b>	The value of this object indicates if the keychain is usable for authentication
<b>Context</b>	<a href="#">system authentication keychain name</a> <i>string</i> <b>usable</b> <i>boolean</i>
<b>Tree</b>	<a href="#">usable</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **banner**

<b>Description</b>	Contains configuration and state related to system banners
<b>Context</b>	<a href="#">system banner</a>
<b>Tree</b>	<a href="#">banner</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **login-banner** *string*

<b>Description</b>	Banner to display before a user has authenticated
<b>Context</b>	<a href="#">system banner login-banner</a> <i>string</i>
<b>Tree</b>	<a href="#">login-banner</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **motd-banner** *string*

<b>Description</b>	Banner to display after a user has authenticated
<b>Context</b>	<a href="#">system banner motd-banner</a> <i>string</i>
<b>Tree</b>	<a href="#">motd-banner</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## boot

**Description** Top-level container for configuration and state data related to booting the system

**Context** [system boot](#)

**Tree** [boot](#)

**Configurable** True

**Platforms** Supported on all platforms

## autoboot

**Description** Top-level container for configuration and state data related to autobooting the system

**Context** [system boot autoboot](#)

**Tree** [autoboot](#)

**Configurable** True

**Platforms** Supported on all platforms

## admin-state *keyword*

**Description** Administratively enable or disable autoboot functionality

**Context** [system boot autoboot admin-state keyword](#)

**Tree** [admin-state](#)

**Options**

- enable
- disable

**Configurable** True

**Platforms** Supported on all platforms

## attempts *number*

**Description** Sets the amount of executions to try autoboot, before rebooting the system

**Context** [system boot autoboot attempts number](#)

**Tree** [attempts](#)

**Range** 1 to 10



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **client-id** *keyword*

<b>Description</b>	The client ID to use on outgoing DHCP requests
<b>Context</b>	<a href="#">system boot autoboot client-id</a> <i>keyword</i>
<b>Tree</b>	<a href="#">client-id</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>serial Use the chassis serial number as the client ID</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **interface** *reference*

<b>Description</b>	Sets the interface to use for autoboot functionality
<b>Context</b>	<a href="#">system boot autoboot interface</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Default</b>	mgmt0
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **mode** *string*

<b>Description</b>	Ztp operation modes. One or more modes can passed
<b>Context</b>	<a href="#">system boot autoboot mode</a> <i>string</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-state** *string*

<b>Description</b>	The current operational status of the autoboot process
<b>Context</b>	<a href="#">system boot autoboot oper-state</a> <i>string</i>

<b>Tree</b>	<a href="#">oper-state</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**timeout** *number*

<b>Description</b>	Sets the timeout for each attempt to autoboot
<b>Context</b>	<a href="#">system boot autoboot timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	200 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**fips-140**

<b>Description</b>	Boot up the router in fips-provider mode  In fips-provider mode only fips approved algorithms are allowed. In addition for fip-provider mode to take effect a reboot of the router is needed.
<b>Context</b>	<a href="#">system boot fips-140</a>
<b>Tree</b>	<a href="#">fips-140</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	This leaf contains the configured, desired state of the fips-provider.
<b>Context</b>	<a href="#">system boot fips-140 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-down-reason** *keyword*

<b>Description</b>	The reason for not enabling fips operational down
<b>Context</b>	<a href="#">system boot fips-140 oper-down-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unknown</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of fips-provider.
<b>Context</b>	<a href="#">system boot fips-140 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down Component or process is not operational</li> <li>empty Component slot is empty</li> <li>downloading Component is downloading image into memory</li> <li>booting Component is booting downloaded image</li> <li>starting Component image operational, application processes starting</li> <li>failed Component or process has failed</li> <li>synchronizing Component is currently being synchronized</li> <li>upgrading Component is currently being upgraded</li> <li>low-power Component is offline due to insufficient system power</li> <li>degraded Component or process is in a degraded state</li> </ul>

- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### golden-image *string*

<b>Description</b>	The local image the system reverts to when a factory reset operation is requested  The value is the folder that contains the initramfs, kernel, and squashfs image. The search path for these directories is /mnt/nokiaos/<folder>
<b>Context</b>	<a href="#">system boot golden-image string</a>
<b>Tree</b>	<a href="#">golden-image</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### image *string*

<b>Description</b>	Ordered list of local images used to boot the system  This directly translates into boot configuration in grub, where the images are tried in the order specified by the user. Images are sourced via the internal SD card, and the value passed is the folder that contains the initramfs, kernel, and squashfs image. The search path for these directories is /mnt/nokiaos/<folder>
<b>Context</b>	<a href="#">system boot image string</a>
<b>Tree</b>	<a href="#">image</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	3

## bridge-table

<b>Description</b>	system bridge-table information
<b>Context</b>	<a href="#">system bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## evpn

<b>Description</b>	System bridge-table BGP-EVPN information
<b>Context</b>	<a href="#">system bridge-table evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mpls-multicast-tep

<b>Description</b>	System bridge-table BGP-EVPN MPLS multicast Termination Endpoint information
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep</a>
<b>Tree</b>	<a href="#">mpls-multicast-tep</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep statistics</a>
<b>Tree</b>	<a href="#">statistics</a>

<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**active-entries** *number*

<b>Description</b>	The total number of active BGP-EVPN MPLS multicast Termination Endpoints (TEPs)
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep statistics active-entries number</a>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-entries** *number*

<b>Description</b>	The maximum number of BGP-EVPN MPLS multicast Termination EndPoints (TEPs) allowed in the system
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep statistics max-entries number</a>
<b>Tree</b>	<a href="#">max-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-entries** *number*

<b>Description</b>	The total number of BGP-EVPN MPLS multicast Termination EndPoints (TEPs)
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep statistics total-entries number</a>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** *tep* (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Enter the tep list instance
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep tep tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">tep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tep** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote BGP-EVPN MPLS multicast Termination Endpoint (TEP)
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep tep tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index** *number*

<b>Description</b>	The hardware index (system allocated) for the BGP-EVPN MPLS multicast Termination Endpoint (TEP)  If a non-zero hardware index is allocated, then there are available system resources and there is at least one BGP-EVPN MPLS multicast destination (using this TEP) ready to be programmed. If the hardware index is 0, there are not resources left and the TEP is not programmed, even if an Inclusive Multicast Ethernet Tag route was correctly imported from a peer.
<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep tep tep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">index</a> <i>number</i>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-changed** *string*

<b>Description</b>	The date and time of the last update of this BGP-EVPN MPLS multicast Termination Endpoint
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<b>Context</b>	<a href="#">system bridge-table evpn mpls-multicast-tep tep tep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">last-changed</a> <i>string</i>
<b>Tree</b>	<a href="#">last-changed</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-learning

<b>Description</b>	Enter the mac-learning context
<b>Context</b>	<a href="#">system bridge-table mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## mac-relearn-only *boolean*

<b>Description</b>	The value of this leaf indicates that the system will not learn any new mac addresses, but will relearn any that are already programmed
<b>Context</b>	<a href="#">system bridge-table mac-learning mac-relearn-only</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mac-relearn-only</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## mac-limit

<b>Description</b>	Bridge Table size and thresholds.
<b>Context</b>	<a href="#">system bridge-table mac-limit</a>
<b>Tree</b>	<a href="#">mac-limit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## maximum-entries *number*

<b>Description</b>	Maximum number of mac addresses allowed in the system bridge-table.
<b>Context</b>	<a href="#">system bridge-table mac-limit maximum-entries</a> <i>number</i>



<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **warning-threshold-pct** *number*

<b>Description</b>	Percentage of the configured max-number-macs over which a warning is triggered. The warning message is cleared when the percentage drops below the configured percentage minus 5%
<b>Context</b>	<a href="#">system bridge-table mac-limit warning-threshold-pct</a> <i>number</i>
<b>Tree</b>	<a href="#">warning-threshold-pct</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **proxy-arp**

<b>Description</b>	system bridge-table proxy ARP entry information
<b>Context</b>	<a href="#">system bridge-table proxy-arp</a>
<b>Tree</b>	<a href="#">proxy-arp</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **active-entries** *number*

<b>Description</b>	The total number of active proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-origin** [origin](#) *keyword*

<b>Description</b>	the origin of the proxy entry installed in the table.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-origin</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**origin** *keyword*

<b>Description</b>	Enter the origin context
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-entries** *number*

<b>Description</b>	The total number of active proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>

<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword in-active-entries number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pending-entries** *number*

<b>Description</b>	The total number of pending proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword pending-entries number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-entries** *number*

<b>Description</b>	The total number of proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics neighbor-origin origin</a> <i>keyword total-entries number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**pending-entries** *number*

<b>Description</b>	The total number of pending proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-entries** *number*

<b>Description</b>	The total number of proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-arp statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**proxy-nd**

<b>Description</b>	system bridge-table proxy ND entry information
<b>Context</b>	<a href="#">system bridge-table proxy-nd</a>
<b>Tree</b>	<a href="#">proxy-nd</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**active-entries** *number*

<b>Description</b>	The total number of active proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**in-active-entries** *number*

<b>Description</b>	The total number of inactive proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics in-active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">in-active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**neighbor-origin** [origin](#) *keyword*

<b>Description</b>	the origin of the proxy entry installed in the table.
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics neighbor-origin origin</a> <i>keyword</i>
<b>Tree</b>	<a href="#">neighbor-origin</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**origin** *keyword*

<b>Description</b>	Enter the origin context
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics neighbor-origin origin</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• dynamic</li> <li>• evpn</li> <li>• duplicate</li> </ul>
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **active-entries** *number*

**Description** The total number of active proxy entries.

**Context** [system](#) [bridge-table](#) [proxy-nd](#) [statistics](#) [neighbor-origin](#) [origin](#) *keyword* [active-entries](#) *number*

**Tree** [active-entries](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **in-active-entries** *number*

**Description** The total number of inactive proxy entries.

**Context** [system](#) [bridge-table](#) [proxy-nd](#) [statistics](#) [neighbor-origin](#) [origin](#) *keyword* [in-active-entries](#) *number*

**Tree** [in-active-entries](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **pending-entries** *number*

**Description** The total number of pending proxy entries.

**Context** [system](#) [bridge-table](#) [proxy-nd](#) [statistics](#) [neighbor-origin](#) [origin](#) *keyword* [pending-entries](#) *number*

**Tree** [pending-entries](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **total-entries** *number*

**Description** The total number of proxy entries.

**Context** [system](#) [bridge-table](#) [proxy-nd](#) [statistics](#) [neighbor-origin](#) [origin](#) *keyword* [total-entries](#) *number*

<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **pending-entries** *number*

<b>Description</b>	The total number of pending proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics pending-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">pending-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-entries** *number*

<b>Description</b>	The total number of proxy entries.
<b>Context</b>	<a href="#">system bridge-table proxy-nd statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system bridge-table statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **active-entries** *number*

<b>Description</b>	The total number of macs that are active on the system.
<b>Context</b>	<a href="#">system bridge-table statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">system bridge-table statistics failed-entries number</a>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**mac-type** *type keyword*

<b>Description</b>	the type of the mac in the system.
<b>Context</b>	<a href="#">system bridge-table statistics mac-type type keyword</a>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">system bridge-table statistics mac-type type keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> </ul>



- irb-interface-vrrp

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **active-entries** *number*

<b>Description</b>	The total number of macs of this type on the system.
<b>Context</b>	<a href="#">system bridge-table statistics mac-type type keyword active-entries number</a>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">system bridge-table statistics mac-type type keyword failed-entries number</a>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the system.
<b>Context</b>	<a href="#">system bridge-table statistics mac-type type keyword total-entries number</a>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the system.
<b>Context</b>	<a href="#">system bridge-table statistics total-entries number</a>

<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## clock

<b>Description</b>	Top-level container for system clock configuration and state
<b>Context</b>	<a href="#">system clock</a>
<b>Tree</b>	<a href="#">clock</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## timezone *keyword*

<b>Description</b>	The timezone to use for the system Based on IANAs Time Zone database
<b>Context</b>	<a href="#">system clock timezone keyword</a>
<b>Tree</b>	<a href="#">timezone</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Africa/Abidjan</li> <li>• Africa/Accra</li> <li>• Africa/Addis_Ababa</li> <li>• Africa/Algiers</li> <li>• Africa/Asmara</li> <li>• Africa/Bamako</li> <li>• Africa/Bangui</li> <li>• Africa/Banjul</li> <li>• Africa/Bissau</li> <li>• Africa/Blantyre</li> <li>• Africa/Brazzaville</li> <li>• Africa/Bujumbura</li> <li>• Africa/Cairo</li> <li>• Africa/Casablanca</li> <li>• Africa/Ceuta Ceuta, Melilla</li> <li>• Africa/Conakry</li> <li>• Africa/Dakar</li> </ul>

- Africa/Dar\_es\_Salaam
- Africa/Djibouti
- Africa/Douala
- Africa/El\_Aaiun
- Africa/Freetown
- Africa/Gaborone
- Africa/Harare
- Africa/Johannesburg
- Africa/Juba
- Africa/Kampala
- Africa/Khartoum
- Africa/Kigali
- Africa/Kinshasa  
Dem. Rep. of Congo (west)
- Africa/Lagos
- Africa/Libreville
- Africa/Lome
- Africa/Luanda
- Africa/Lubumbashi  
Dem. Rep. of Congo (east)
- Africa/Lusaka
- Africa/Malabo
- Africa/Maputo
- Africa/Maseru
- Africa/Mbabane
- Africa/Mogadishu
- Africa/Monrovia
- Africa/Nairobi
- Africa/Ndjamena
- Africa/Niamey
- Africa/Nouakchott
- Africa/Ouagadougou
- Africa/Porto-Novo
- Africa/Sao\_Tome
- Africa/Tripoli
- Africa/Tunis

- Africa/Windhoek
- America/Adak  
Aleutian Islands
- America/Anchorage  
Alaska (most areas)
- America/Anguilla
- America/Antigua
- America/Araguaina  
Tocantins
- America/Argentina/Buenos\_Aires  
Buenos Aires (BA, CF)
- America/Argentina/Catamarca  
Catamarca (CT); Chubut (CH)
- America/Argentina/Cordoba  
Argentina (most areas: CB, CC, CN, ER, FM, MN, SE, SF)
- America/Argentina/Jujuy  
Jujuy (JY)
- America/Argentina/La\_Rioja  
La Rioja (LR)
- America/Argentina/Mendoza  
Mendoza (MZ)
- America/Argentina/Rio\_Gallegos  
Santa Cruz (SC)
- America/Argentina/Salta  
Salta (SA, LP, NQ, RN)
- America/Argentina/San\_Juan  
San Juan (SJ)
- America/Argentina/San\_Luis  
San Luis (SL)
- America/Argentina/Tucuman  
Tucuman (TM)
- America/Argentina/Ushuaia  
Tierra del Fuego (TF)
- America/Aruba
- America/Asuncion
- America/Atikokan

- EST - ON (Atikokan); NU (Coral H)
- America/Bahia  
Bahia
- America/Bahia\_Banderas  
Central Time - Bahia de Banderas
- America/Barbados
- America/Belem  
Para (east); Amapa
- America/Belize
- America/Blanc-Sablon  
AST - QC (Lower North Shore)
- America/Boa\_Vista  
Roraima
- America/Bogota
- America/Boise  
Mountain - ID (south); OR (east)
- America/Cambridge\_Bay  
Mountain - NU (west)
- America/Campo\_Grande  
Mato Grosso do Sul
- America/Cancun  
Eastern Standard Time - Quintana Roo
- America/Caracas
- America/Cayenne
- America/Cayman
- America/Chicago  
Central (most areas)
- America/Chihuahua  
Mountain Time - Chihuahua (most areas)
- America/Costa\_Rica
- America/Creston  
MST - BC (Creston)
- America/Cuiaba  
Mato Grosso
- America/Curacao
- America/Danmarkshavn

- National Park (east coast)
- America/Dawson  
Pacific - Yukon (north)
- America/Dawson\_Creek  
MST - BC (Dawson Cr, Ft St John)
- America/Denver  
Mountain (most areas)
- America/Detroit  
Eastern - MI (most areas)
- America/Dominica
- America/Edmonton  
Mountain - AB; BC (E); SK (W)
- America/Eirunepe  
Amazonas (west)
- America/El\_Salvador
- America/Fort\_Nelson  
MST - BC (Ft Nelson)
- America/Fortaleza  
Brazil (northeast: MA, PI, CE, RN, PB)
- America/Glace\_Bay  
Atlantic - NS (Cape Breton)
- America/Godthab  
Greenland (most areas)
- America/Goose\_Bay  
Atlantic - Labrador (most areas)
- America/Grand\_Turk
- America/Grenada
- America/Guadeloupe
- America/Guatemala
- America/Guayaquil  
Ecuador (mainland)
- America/Guyana
- America/Halifax  
Atlantic - NS (most areas); PE
- America/Havana
- America/Hermosillo

## Mountain Standard Time - Sonora

- America/Indiana/Indianapolis  
Eastern - IN (most areas)
- America/Indiana/Knox  
Central - IN (Starke)
- America/Indiana/Marengo  
Eastern - IN (Crawford)
- America/Indiana/Petersburg  
Eastern - IN (Pike)
- America/Indiana/Tell\_City  
Central - IN (Perry)
- America/Indiana/Vevay  
Eastern - IN (Switzerland)
- America/Indiana/Vincennes  
Eastern - IN (Da, Du, K, Mn)
- America/Indiana/Winamac  
Eastern - IN (Pulaski)
- America/Inuvik  
Mountain - NT (west)
- America/Iqaluit  
Eastern - NU (most east areas)
- America/Jamaica
- America/Juneau  
Alaska - Juneau area
- America/Kentucky/Louisville  
Eastern - KY (Louisville area)
- America/Kentucky/Monticello  
Eastern - KY (Wayne)
- America/Kralendijk
- America/La\_Paz
- America/Lima
- America/Los\_Angeles  
Pacific
- America/Lower\_Princes
- America/Maceio  
Alagoas, Sergipe

- America/Managua
- America/Manaus  
Amazonas (east)
- America/Marigot
- America/Martinique
- America/Matamoros  
Central Time US - Coahuila, Nuevo Leon, Tamaulipas (US border)
- America/Mazatlan  
Mountain Time - Baja California Sur, Nayarit, Sinaloa
- America/Menominee  
Central - MI (Wisconsin border)
- America/Merida  
Central Time - Campeche, Yucatan
- America/Metlakatla  
Alaska - Annette Island
- America/Mexico\_City  
Central Time
- America/Miquelon
- America/Moncton  
Atlantic - New Brunswick
- America/Monterrey  
Central Time - Durango; Coahuila, Nuevo Leon, Tamaulipas (most areas)
- America/Montevideo
- America/Montserrat
- America/Nassau
- America/New\_York  
Eastern (most areas)
- America/Nipigon  
Eastern - ON, QC (no DST 1967-73)
- America/Nome  
Alaska (west)
- America/Noronha  
Atlantic islands
- America/North\_Dakota/Beulah  
Central - ND (Mercer)
- America/North\_Dakota/Center



- Central - ND (Oliver)
- America/North\_Dakota/New\_Salem
- Central - ND (Morton rural)
- America/Ojinaga
- Mountain Time US - Chihuahua (US border)
- America/Panama
- America/Pangnirtung
- Eastern - NU (Pangnirtung)
- America/Paramaribo
- America/Phoenix
- MST - Arizona (except Navajo)
- America/Port-au-Prince
- America/Port\_of\_Spain
- America/Porto\_Velho
- Rondonia
- America/Puerto\_Rico
- America/Punta\_Arenas
- Region of Magallanes
- America/Rainy\_River
- Central - ON (Rainy R, Ft Frances)
- America/Rankin\_Inlet
- Central - NU (central)
- America/Recife
- Pernambuco
- America/Regina
- CST - SK (most areas)
- America/Resolute
- Central - NU (Resolute)
- America/Rio\_Branco
- Acre
- America/Santarem
- Para (west)
- America/Santiago
- Chile (most areas)
- America/Santo\_Domingo
- America/Sao\_Paulo

- Brazil (southeast: GO, DF, MG, ES, RJ, SP, PR, SC, RS)
- America/Scoresbysund  
Scoresbysund/Ittoqqortoormiit
- America/Sitka  
Alaska - Sitka area
- America/St\_Barthelemy
- America/St\_Johns  
Newfoundland; Labrador (southeast)
- America/St\_Kitts
- America/St\_Lucia
- America/St\_Thomas
- America/St\_Vincent
- America/Swift\_Current  
CST - SK (midwest)
- America/Tegucigalpa
- America/Thule  
Thule/Pituffik
- America/Thunder\_Bay  
Eastern - ON (Thunder Bay)
- America/Tijuana  
Pacific Time US - Baja California
- America/Toronto  
Eastern - ON, QC (most areas)
- America/Tortola
- America/Vancouver  
Pacific - BC (most areas)
- America/Whitehorse  
Pacific - Yukon (south)
- America/Winnipeg  
Central - ON (west); Manitoba
- America/Yakutat  
Alaska - Yakutat
- America/Yellowknife  
Mountain - NT (central)
- Antarctica/Casey  
Casey

- Antarctica/Davis  
Davis
- Antarctica/DumontDUrville  
Dumont-d'Urville
- Antarctica/Macquarie  
Macquarie Island
- Antarctica/Mawson  
Mawson
- Antarctica/McMurdo  
New Zealand time - McMurdo, South Pole
- Antarctica/Palmer  
Palmer
- Antarctica/Rothera  
Rothera
- Antarctica/Syowa  
Syowa
- Antarctica/Troll  
Troll
- Antarctica/Vostok  
Vostok
- Arctic/Longyearbyen
- Asia/Aden
- Asia/Almaty  
Kazakhstan (most areas)
- Asia/Amman
- Asia/Anadyr  
MSK+09 - Bering Sea
- Asia/Aqtau  
Mangghystau/Mankistau
- Asia/Aqtobe  
Aqtobe/Aktobe
- Asia/Ashgabat
- Asia/Atyrau  
Atyrau/Atirau/Gur'yev
- Asia/Baghdad
- Asia/Bahrain

- Asia/Baku
- Asia/Bangkok
- Asia/Barnaul  
MSK+04 - Altai
- Asia/Beirut
- Asia/Bishkek
- Asia/Brunei
- Asia/Chita  
MSK+06 - Zabaykalsky
- Asia/Choibalsan  
Dornod, Sukhbaatar
- Asia/Colombo
- Asia/Damascus
- Asia/Dhaka
- Asia/Dili
- Asia/Dubai
- Asia/Dushanbe
- Asia/Famagusta  
Northern Cyprus
- Asia/Gaza  
Gaza Strip
- Asia/Hebron  
West Bank
- Asia/Ho\_Chi\_Minh
- Asia/Hong\_Kong
- Asia/Hovd  
Bayan-Olgii, Govi-Altai, Hovd, Uvs, Zavkhan
- Asia/Irkutsk  
MSK+05 - Irkutsk, Buryatia
- Asia/Jakarta  
Java, Sumatra
- Asia/Jayapura  
New Guinea (West Papua / Irian Jaya); Maluku/Moluccas
- Asia/Jerusalem
- Asia/Kabul
- Asia/Kamchatka

- MSK+09 - Kamchatka
- Asia/Karachi
- Asia/Kathmandu
- Asia/Khandyga
- MSK+06 - Tomponsky, Ust-Maysky
- Asia/Kolkata
- Asia/Krasnoyarsk
- MSK+04 - Krasnoyarsk area
- Asia/Kuala\_Lumpur
- Malaysia (peninsula)
- Asia/Kuching
- Sabah, Sarawak
- Asia/Kuwait
- Asia/Macau
- Asia/Magadan
- MSK+08 - Magadan
- Asia/Makassar
- Borneo (east, south); Sulawesi/Celebes, Bali, Nusa Tenggara; Timor (west)
- Asia/Manila
- Asia/Muscat
- Asia/Nicosia
- Cyprus (most areas)
- Asia/Novokuznetsk
- MSK+04 - Kemerovo
- Asia/Novosibirsk
- MSK+04 - Novosibirsk
- Asia/Omsk
- MSK+03 - Omsk
- Asia/Oral
- West Kazakhstan
- Asia/Phnom\_Penh
- Asia/Pontianak
- Borneo (west, central)
- Asia/Pyongyang
- Asia/Qatar

- Asia/Qostanay  
Qostanay/Kostanay/Kustanay
- Asia/Qyzylorda  
Qyzylorda/Kyzylorda/Kzyl-Orda
- Asia/Riyadh
- Asia/Sakhalin  
MSK+08 - Sakhalin Island
- Asia/Samarkand  
Uzbekistan (west)
- Asia/Seoul
- Asia/Shanghai  
Beijing Time
- Asia/Singapore
- Asia/Srednekolymsk  
MSK+08 - Sakha (E); North Kuril Is
- Asia/Taipei
- Asia/Tashkent  
Uzbekistan (east)
- Asia/Tbilisi
- Asia/Tehran
- Asia/Thimphu
- Asia/Tokyo
- Asia/Tomsk  
MSK+04 - Tomsk
- Asia/Ulaanbaatar  
Mongolia (most areas)
- Asia/Urumqi  
Xinjiang Time
- Asia/Ust-Nera  
MSK+07 - Oymyakonsky
- Asia/Vientiane
- Asia/Vladivostok  
MSK+07 - Amur River
- Asia/Yakutsk  
MSK+06 - Lena River
- Asia/Yangon

- Asia/Yekaterinburg  
MSK+02 - Urals
- Asia/Yerevan
- Atlantic/Azores  
Azores
- Atlantic/Bermuda
- Atlantic/Canary  
Canary Islands
- Atlantic/Cape\_Verde
- Atlantic/Faroe
- Atlantic/Madeira  
Madeira Islands
- Atlantic/Reykjavik
- Atlantic/South\_Georgia
- Atlantic/St\_Helena
- Atlantic/Stanley
- Australia/Adelaide  
South Australia
- Australia/Brisbane  
Queensland (most areas)
- Australia/Broken\_Hill  
New South Wales (Yancowinna)
- Australia/Currie  
Tasmania (King Island)
- Australia/Darwin  
Northern Territory
- Australia/Eucla  
Western Australia (Eucla)
- Australia/Hobart  
Tasmania (most areas)
- Australia/Lindeman  
Queensland (Whitsunday Islands)
- Australia/Lord\_Howe  
Lord Howe Island
- Australia/Melbourne  
Victoria

- Australia/Perth  
Western Australia (most areas)
- Australia/Sydney  
New South Wales (most areas)
- Europe/Amsterdam
- Europe/Andorra
- Europe/Astrakhan  
MSK+01 - Astrakhan
- Europe/Athens
- Europe/Belgrade
- Europe/Berlin  
Germany (most areas)
- Europe/Bratislava
- Europe/Brussels
- Europe/Bucharest
- Europe/Budapest
- Europe/Busingen  
Busingen
- Europe/Chisinau
- Europe/Copenhagen
- Europe/Dublin
- Europe/Gibraltar
- Europe/Guernsey
- Europe/Helsinki
- Europe/Isle\_of\_Man
- Europe/Istanbul
- Europe/Jersey
- Europe/Kaliningrad  
MSK-01 - Kaliningrad
- Europe/Kiev  
Ukraine (most areas)
- Europe/Kirov  
MSK+00 - Kirov
- Europe/Lisbon  
Portugal (mainland)
- Europe/Ljubljana



- Europe/London
- Europe/Luxembourg
- Europe/Madrid  
Spain (mainland)
- Europe/Malta
- Europe/Mariehamn
- Europe/Minsk
- Europe/Monaco
- Europe/Moscow  
MSK+00 - Moscow area
- Europe/Oslo
- Europe/Paris
- Europe/Podgorica
- Europe/Prague
- Europe/Riga
- Europe/Rome
- Europe/Samara  
MSK+01 - Samara, Udmurtia
- Europe/San\_Marino
- Europe/Sarajevo
- Europe/Saratov  
MSK+01 - Saratov
- Europe/Simferopol  
MSK+00 - Crimea
- Europe/Skopje
- Europe/Sofia
- Europe/Stockholm
- Europe/Tallinn
- Europe/Tirane
- Europe/Ulyanovsk  
MSK+01 - Ulyanovsk
- Europe/Uzhgorod  
Ruthenia
- Europe/Vaduz
- Europe/Vatican
- Europe/Vienna

- Europe/Vilnius
- Europe/Volgograd  
MSK+01 - Volgograd
- Europe/Warsaw
- Europe/Zagreb
- Europe/Zaporozhye  
Zaporozh'ye/Zaporizhia; Lugansk/Luhansk (east)
- Europe/Zurich
- Indian/Antananarivo
- Indian/Chagos
- Indian/Christmas
- Indian/Cocos
- Indian/Comoro
- Indian/Kerguelen
- Indian/Mahe
- Indian/Maldives
- Indian/Mauritius
- Indian/Mayotte
- Indian/Reunion
- Pacific/Apia
- Pacific/Auckland  
New Zealand (most areas)
- Pacific/Bougainville  
Bougainville
- Pacific/Chatham  
Chatham Islands
- Pacific/Chuuk  
Chuuk/Truk, Yap
- Pacific/Easter  
Easter Island
- Pacific/Efate
- Pacific/Enderbury  
Phoenix Islands
- Pacific/Fakaofu
- Pacific/Fiji
- Pacific/Funafuti

- Pacific/Galapagos  
Galapagos Islands
- Pacific/Gambier  
Gambier Islands
- Pacific/Guadalcanal
- Pacific/Guam
- Pacific/Honolulu  
Hawaii
- Pacific/Kiritimati  
Line Islands
- Pacific/Kosrae  
Kosrae
- Pacific/Kwajalein  
Kwajalein
- Pacific/Majuro  
Marshall Islands (most areas)
- Pacific/Marquesas  
Marquesas Islands
- Pacific/Midway  
Midway Islands
- Pacific/Nauru
- Pacific/Niue
- Pacific/Norfolk
- Pacific/Noumea
- Pacific/Pago\_Pago
- Pacific/Palau
- Pacific/Pitcairn
- Pacific/Pohnpei  
Pohnpei/Ponape
- Pacific/Port\_Moresby  
Papua New Guinea (most areas)
- Pacific/Rarotonga
- Pacific/Saipan
- Pacific/Tahiti  
Society Islands
- Pacific/Tarawa

	Gilbert Islands
	<ul style="list-style-type: none"> <li>• Pacific/Tongatapu</li> <li>• Pacific/Wake</li> </ul>
	Wake Island
	<ul style="list-style-type: none"> <li>• Pacific/Wallis</li> <li>• UTC</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## configuration

<b>Description</b>	Top-level container for configuration and state data related to the system configuration
<b>Context</b>	<a href="#">system configuration</a>
<b>Tree</b>	<a href="#">configuration</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## auto-checkpoint *boolean*

<b>Description</b>	Configuration checkpoint will be automatically created after every successful commit (if set to true).
<b>Context</b>	<a href="#">system configuration auto-checkpoint <i>boolean</i></a>
<b>Tree</b>	<a href="#">auto-checkpoint</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## auto-save *boolean*

<b>Description</b>	Configuration save will be automatically done after every successful commit (if set to true).
<b>Context</b>	<a href="#">system configuration auto-save <i>boolean</i></a>
<b>Tree</b>	<a href="#">auto-save</a>
<b>Default</b>	false
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **candidate name string**

**Description** List of configuration candidates currently active  
**Context** [system configuration candidate name string](#)  
**Tree** [candidate](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **name string**

**Description** Name of the configuration candidate  
**Context** [system configuration candidate name string](#)  
**String Length** 1 to 255  
**Configurable** False  
**Platforms** Supported on all platforms

### **started string**

**Description** Start date and time of the configuration session  
**Context** [system configuration candidate name string started string](#)  
**Tree** [started](#)  
**String Length** 20 to 32  
**Configurable** False  
**Platforms** Supported on all platforms

### **type keyword**

**Description** Type of configuration candidate  
**Context** [system configuration candidate name string type keyword](#)  
**Tree** [type](#)  
**Options**

- shared
- private

**Configurable** False

**Platforms** Supported on all platforms

### **username** *string*

**Description** User that started the configuration session  
**Context** [system configuration candidate name](#) *string* [username](#) *string*  
**Tree** [username](#)  
**String Length** 1 to 255  
**Configurable** False  
**Platforms** Supported on all platforms

### **checkpoint id** *number*

**Description** List of current checkpoints present in the system  
**Context** [system configuration checkpoint id](#) *number*  
**Tree** [checkpoint](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **id** *number*

**Description** System generated ID for the checkpoint  
**Context** [system configuration checkpoint id](#) *number*  
**Configurable** False  
**Platforms** Supported on all platforms

### **comment** *string*

**Description** User provided annotations associated with the checkpoint  
**Context** [system configuration checkpoint id](#) *number* [comment](#) *string*  
**Tree** [comment](#)  
**Configurable** False  
**Platforms** Supported on all platforms

**created** *string*

<b>Description</b>	Date and time this checkpoint was created
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">created</a> <i>string</i>
<b>Tree</b>	<a href="#">created</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	User provided name of the checkpoint
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">name</a> <i>string</i>
<b>Tree</b>	<a href="#">name</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**size** *number*

<b>Description</b>	Size of the checkpoint configuration file
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">size</a> <i>number</i>
<b>Tree</b>	<a href="#">size</a>
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tag** *string*

<b>Description</b>	Full system version that the checkpoint was generated on
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">tag</a> <i>string</i>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**username** *string*

<b>Description</b>	Username that created this checkpoint
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">username</a> <i>string</i>
<b>Tree</b>	<a href="#">username</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**version** *string*

<b>Description</b>	System version that the checkpoint was generated on
<b>Context</b>	<a href="#">system configuration checkpoint id</a> <i>number</i> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**commit** *id number*

<b>Description</b>	List of configuration transactions
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number</i>
<b>Tree</b>	<a href="#">commit</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	System identifier for the commit
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number</i>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**comment** *string*

<b>Description</b>	Operator provided comment associated with this commit
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number</i> <a href="#">comment</a> <i>string</i>



<b>Tree</b>	<a href="#">comment</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ended string**

<b>Description</b>	End date and time of the commit This field is not populated if the commit is in progress
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number ended string</i>
<b>Tree</b>	<a href="#">ended</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name string**

<b>Description</b>	Name of the configuration candidate the commit was triggered from
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number name string</i>
<b>Tree</b>	<a href="#">name</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**persist-id string**

<b>Description</b>	Persistent confirmed commit identifier
<b>Context</b>	<a href="#">system configuration commit id</a> <i>number persist-id string</i>
<b>Tree</b>	<a href="#">persist-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**started string**

<b>Description</b>	Start date and time of the commit
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<b>Context</b>	<a href="#">system configuration commit id number started string</a>
<b>Tree</b>	<a href="#">started</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**status** *keyword*

<b>Description</b>	Current status of the commit
<b>Context</b>	<a href="#">system configuration commit id number status keyword</a>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• validating</li> <li>• publishing</li> <li>• unconfirmed</li> <li>• checkpoint</li> <li>• save</li> <li>• complete</li> <li>• reverting</li> <li>• failed</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Type of configuration candidate the commit was triggered from
<b>Context</b>	<a href="#">system configuration commit id number type keyword</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• shared</li> <li>• private</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**username** *string*

<b>Description</b>	User that started the commit
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<b>Context</b>	<a href="#">system configuration commit id</a> <i>number</i> <a href="#">username</a> <i>string</i>
<b>Tree</b>	<a href="#">username</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**idle-timeout** *number*

<b>Description</b>	The idle timeout of configuration candidates After this period of no activity, the candidate is emptied and removed from the system.
<b>Context</b>	<a href="#">system configuration idle-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">idle-timeout</a>
<b>Default</b>	10080
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**last-change** *string*

<b>Description</b>	Date and time of the last successful commit Set to the time the configuration was loaded by management server, so is refreshed at boot time.
<b>Context</b>	<a href="#">system configuration last-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**max-candidates** *number*

<b>Description</b>	The maximum number of combined private and shared candidates
<b>Context</b>	<a href="#">system configuration max-candidates</a> <i>number</i>
<b>Tree</b>	<a href="#">max-candidates</a>
<b>Range</b>	1 to 255
<b>Default</b>	10

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **max-checkpoints** *number*

<b>Description</b>	The number of checkpoints kept by the system
<b>Context</b>	<a href="#">system configuration max-checkpoints number</a>
<b>Tree</b>	<a href="#">max-checkpoints</a>
<b>Range</b>	1 to 255
<b>Default</b>	10
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **pathz**

<b>Description</b>	Information relating to the active Pathz authorization policy instances  This policies is provided by the gNSI gRPC service, and can be changed using the gNSI.Pathz.Rotate RPC
<b>Context</b>	<a href="#">system configuration pathz</a>
<b>Tree</b>	<a href="#">pathz</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **collect-policy-success-failure-counters** *boolean*

<b>Description</b>	Indicates whether the gNSI.pathz module should collect access counters information.
<b>Context</b>	<a href="#">system configuration pathz collect-policy-success-failure-counters boolean</a>
<b>Tree</b>	<a href="#">collect-policy-success-failure-counters</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy instance keyword**

<b>Description</b>	Information about freshness of an schema-path-based Pathz authorization policy that have been installed on the device using the gNSI schema-path-based Pathz authorization policy management service.
<b>Context</b>	<a href="#">system configuration pathz policy instance keyword</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance keyword**

<b>Description</b>	Enter the instance context
<b>Context</b>	<a href="#">system configuration pathz policy instance keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ACTIVE The Pathz authorization policy that is currently used to authorize access.</li> <li>SANDBOX The most recent Pathz policy that has been uploaded during the Rotation RPC. If there is no Rotate() RPC in progress, then the values of version and created-on will be empty.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The timestamp of the moment when the Pathz policy was created (sent by the gNSI client).
<b>Context</b>	<a href="#">system configuration pathz policy instance keyword created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **policy string**

<b>Description</b>	The policy definition  This JSON string contains the full gRPC authorization policy conforming to the gRPC Path-based authorization policy schema.  This maps to the policy field within a UploadRequest message in the Pathz protobuf.
<b>Context</b>	<a href="#">system configuration pathz policy instance</a> <i>keyword</i> <a href="#">policy string</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **version string**

<b>Description</b>	The version of the Pathz authorization policy (sent by the gNSI client).
<b>Context</b>	<a href="#">system configuration pathz policy instance</a> <i>keyword</i> <a href="#">version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **use-exclusively boolean**

<b>Description</b>	Indicates whether the Pathz authorization policy should be used exclusively for access authorization.  If set to true, the Pathz authorization policy will be used exclusively, any statically configured RBAC rules will be ignored. If set to false, the Pathz authorization policy will be used together with the statically configured RBAC rules (evaluating both policies and taking the logical conjunction of the results).
<b>Context</b>	<a href="#">system configuration pathz use-exclusively</a> <i>boolean</i>
<b>Tree</b>	<a href="#">use-exclusively</a>

<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### role [name](#) *reference*

<b>Description</b>	List of roles configured in the system
<b>Context</b>	<a href="#">system configuration role name</a> <i>reference</i>
<b>Tree</b>	<a href="#">role</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

### name *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">system configuration role name</a> <i>reference</i>
<b>Reference</b>	<a href="#">system aaa authorization role rolename</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### rule [path-reference](#) *string*

<b>Description</b>	List of paths to perform access control against
<b>Context</b>	<a href="#">system configuration role name</a> <i>reference</i> <a href="#">rule path-reference</a> <i>string</i>
<b>Tree</b>	<a href="#">rule</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	256

### [path-reference](#) *string*

<b>Description</b>	Reference to a valid YANG path, in CLI notation
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This path may include keys, wildcards, ranges, and other management server supported constructs. Ranges will be expanded. The root path can be specified with '/'.

E.g. / "/interface" "/acl ipv4-filter foo\* description"

<b>Context</b>	<a href="#">system configuration role name</a> <i>reference rule path-reference string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **action** *keyword*

<b>Description</b>	Action to allow for this path
<b>Context</b>	<a href="#">system configuration role name</a> <i>reference rule path-reference string action keyword</i>
<b>Tree</b>	<a href="#">action</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• read This path may be read by the role</li> <li>• write This path may be written and read by the role</li> <li>• deny This path may not be read or written to by the role</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **session id** *number*

<b>Description</b>	List of configuration sessions currently active
<b>Context</b>	<a href="#">system configuration session id</a> <i>number</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **id** *number*

<b>Description</b>	System generated ID for the configuration session
<b>Context</b>	<a href="#">system configuration session id</a> <i>number</i>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### **exclusive** *boolean*

**Description** Details if this session is running in exclusive mode  
**Context** [system configuration session id number exclusive boolean](#)  
**Tree** [exclusive](#)  
**Configurable** False  
**Platforms** Supported on all platforms

### **name** *string*

**Description** Name of the candidate the session is active on  
Set to 'default' if a non-named candidate is active  
**Context** [system configuration session id number name string](#)  
**Tree** [name](#)  
**String Length** 1 to 255  
**Configurable** False  
**Platforms** Supported on all platforms

### **started** *string*

**Description** Start date and time of the configuration session  
**Context** [system configuration session id number started string](#)  
**Tree** [started](#)  
**String Length** 20 to 32  
**Configurable** False  
**Platforms** Supported on all platforms

### **type** *keyword*

**Description** Type of configuration session  
**Context** [system configuration session id number type keyword](#)  
**Tree** [type](#)  
**Options**

- shared

	<ul style="list-style-type: none"> <li>private</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### username *string*

<b>Description</b>	User that started the configuration session
<b>Context</b>	<a href="#">system configuration session id number username string</a>
<b>Tree</b>	<a href="#">username</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### control-plane-traffic

<b>Description</b>	Container for the control plane traffic.
<b>Context</b>	<a href="#">system control-plane-traffic</a>
<b>Tree</b>	<a href="#">control-plane-traffic</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### input

<b>Description</b>	Defines parameters determining the handling of system generated traffic.
<b>Context</b>	<a href="#">system control-plane-traffic input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### acl

<b>Description</b>	Container for ACL.
<b>Context</b>	<a href="#">system control-plane-traffic input acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**acl-filter** *name reference type reference*

<b>Description</b>	List MAC, IPv4, IPv6 ACL filter(s) to be applied on this subinterface direction
<b>Context</b>	<a href="#">system control-plane-traffic input acl acl-filter name reference type reference</a>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *reference*

<b>Description</b>	Reference to the ACL Filter policy name
<b>Context</b>	<a href="#">system control-plane-traffic input acl acl-filter name reference type reference</a>
<b>Reference</b>	<a href="#">acl acl-filter name string type keyword</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *reference*

<b>Description</b>	Reference to the ACL Filter policy type
<b>Context</b>	<a href="#">system control-plane-traffic input acl acl-filter name reference type reference</a>
<b>Reference</b>	<a href="#">acl acl-filter type</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**output**

<b>Description</b>	Defines parameters determining the handling of system generated traffic.
<b>Context</b>	<a href="#">system control-plane-traffic output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**qos**

<b>Description</b>	Parameters describing QoS handling of system generated traffic
<b>Context</b>	<a href="#">system control-plane-traffic output qos</a>

<b>Tree</b>	<a href="#">qos</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **management-protocols-dscp** (*number | keyword*)

<b>Description</b>	Defines dscp value the system generated traffic by management-protocols should be marked with
<b>Context</b>	<a href="#">system control-plane-traffic output qos management-protocols-dscp</a> ( <i>number   keyword</i> )
<b>Tree</b>	<a href="#">management-protocols-dscp</a>
<b>Range</b>	0 to 63
<b>Default</b>	32
<b>Options</b>	<ul style="list-style-type: none"> <li>• CS0</li> <li>• LE</li> <li>• CS1</li> <li>• AF11</li> <li>• AF12</li> <li>• AF13</li> <li>• CS2</li> <li>• AF21</li> <li>• AF22</li> <li>• AF23</li> <li>• CS3</li> <li>• AF31</li> <li>• AF32</li> <li>• AF33</li> <li>• CS4</li> <li>• AF41</li> <li>• AF42</li> <li>• AF43</li> <li>• CS5</li> <li>• EF</li> <li>• CS6</li> <li>• CS7</li> </ul>
<b>Configurable</b>	True

<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b
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## datapath

<b>Description</b>	Context for system wide forwarding options
<b>Context</b>	<a href="#">system datapath</a>
<b>Tree</b>	<a href="#">datapath</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## forwarding-mode *keyword*

<b>Description</b>	<p>The forwarding mode for Ethernet frames received on all eligible ports of the system</p> <p>In store-and-forward mode, the forwarding of an Ethernet frame received on a particular port must wait until the entire Ethernet frame has been received, including the trailing 4-byte CRC; if the CRC is valid the packet is forwarded to the egress port based on the L2/L3 lookup result but if the CRC is invalid the frame is discarded and the in-error-packets counter is incremented.</p> <p>In cut-through mode, the forwarding ASIC does the L2/L3 forwarding lookup as soon as it has read the necessary packet headers. If the target egress queue of the egress port is not congested the bytes of the received frame are transmitted across the switch fabric as they are received. The fully intact frame is transmitted from the egress port as soon as all the bytes have been received.</p>
<b>Context</b>	<a href="#">system datapath forwarding-mode <i>keyword</i></a>
<b>Tree</b>	<a href="#">forwarding-mode</a>
<b>Default</b>	store-and-forward
<b>Options</b>	<ul style="list-style-type: none"> <li>• store-and-forward</li> <li>• cut-through</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**icmp**

<b>Description</b>	Context for system-wide control of ICMP message generation
<b>Context</b>	<a href="#">system datapath icmp</a>
<b>Tree</b>	<a href="#">icmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rate-limit-per-host**

<b>Description</b>	Context for controller rate limiting behavior per host
<b>Context</b>	<a href="#">system datapath icmp rate-limit-per-host</a>
<b>Tree</b>	<a href="#">rate-limit-per-host</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**max-burst *number***

<b>Description</b>	<p>The maximum burst size for generated ICMP messages sent towards each host</p> <p>A token bucket is maintained for each of the last 1000 IPv4 senders that generated traffic requiring ICMP messages to be sent back to them. Each token bucket has a maximum depth, counted in terms of ICMP messages, controlled by this max-burst parameter and a fill/drain rate controlled by the peak-rate parameter</p>
<b>Context</b>	<a href="#">system datapath icmp rate-limit-per-host max-burst <i>number</i></a>
<b>Tree</b>	<a href="#">max-burst</a>
<b>Range</b>	1 to 50
<b>Default</b>	10
<b>Units</b>	packets
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peak-rate number

<b>Description</b>	The peak rate for generated ICMP messages sent towards each host A token bucket is maintained for each of the last 1000 IPv4 senders that generated traffic requiring ICMP messages to be sent back to them. Each token bucket has a maximum depth, counted in terms of ICMP messages, controlled by the max-burst parameter and a fill/drain rate controlled by this peak-rate parameter
<b>Context</b>	<a href="#">system datapath icmp rate-limit-per-host peak-rate number</a>
<b>Tree</b>	<a href="#">peak-rate</a>
<b>Range</b>	1 to 20
<b>Default</b>	10
<b>Units</b>	packets-per-second
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## icmp6

<b>Description</b>	Context for system-wide control of ICMPv6 message generation
<b>Context</b>	<a href="#">system datapath icmp6</a>
<b>Tree</b>	<a href="#">icmp6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rate-limit-per-host

<b>Description</b>	Context for controller rate limiting behavior per host
<b>Context</b>	<a href="#">system datapath icmp6 rate-limit-per-host</a>
<b>Tree</b>	<a href="#">rate-limit-per-host</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-burst** *number*

**Description** The maximum burst size for generated ICMP messages sent towards each host  
A token bucket is maintained for each of the last 1000 IPv6 senders that generated traffic requiring ICMPv6 messages to be sent back to them. Each token bucket has a maximum depth, counted in terms of ICMP messages, controlled by this max-burst parameter and a fill/drain rate controlled by the peak-rate parameter

**Context** [system datapath icmp6 rate-limit-per-host max-burst](#) *number*

**Tree** [max-burst](#)

**Range** 1 to 50

**Default** 10

**Units** packets

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peak-rate** *number*

**Description** The peak rate for generated ICMP messages sent towards each host  
A token bucket is maintained for each of the last 1000 IPv6 senders that generated traffic requiring ICMPv6 messages to be sent back to them. Each token bucket has a maximum depth, counted in terms of ICMP messages, controlled by the max-burst parameter and a fill/drain rate controlled by this peak-rate parameter

**Context** [system datapath icmp6 rate-limit-per-host peak-rate](#) *number*

**Tree** [peak-rate](#)

**Range** 1 to 20

**Default** 10

**Units** packets-per-second

**Configurable** True



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dhcp-server

**Description** Configures the dhcp server

**Context** [system dhcp-server](#)

**Tree** [dhcp-server](#)

**Configurable** True

**Platforms** Supported on all platforms

## admin-state *keyword*

**Description** Globally enable or disable the dhcp server Disabling this will disable all dhcp servers.

**Context** [system dhcp-server admin-state keyword](#)

**Tree** [admin-state](#)

**Default** disable

**Options**

- enable
- disable

**Configurable** True

**Platforms** Supported on all platforms

## network-instance [name reference](#)

**Description** List of network instances to run a dhcp server in

**Context** [system dhcp-server network-instance name reference](#)

**Tree** [network-instance](#)

**Configurable** True

**Platforms** Supported on all platforms

## name *reference*

**Description** Reference to a configured network instance

**Context** [system dhcp-server network-instance name reference](#)

<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcpv4

<b>Description</b>	Enter the dhcpv4 context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4</a>
<b>Tree</b>	<a href="#">dhcpv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable the dhcp server
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## oper-state *keyword*

<b>Description</b>	Details if the dhcp server is operationally available
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> </ul>

- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**options****Description**

Enter the options context

**Context**[system dhcp-server network-instance name](#) *reference* [dhcpv4 options](#)**Tree**[options](#)**Configurable**

True

**Platforms**

Supported on all platforms

**bootfile-name** *string*

<b>Description</b>	The name of the configuration file the client will use during booting - option 67
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options bootfile-name</a> <i>string</i>
<b>Tree</b>	<a href="#">bootfile-name</a>
<b>String Length</b>	1 to 128
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dns-server** *string*

<b>Description</b>	An Ordered List of DNS servers to return to the dhcp client - option 6
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options dns-server</a> <i>string</i>
<b>Tree</b>	<a href="#">dns-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

**domain-name** *string*

<b>Description</b>	The domain name to return to the dhcp client that the client should use when resolving hostnames via the Domain Name System - option 15
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options domain-name</a> <i>string</i>
<b>Tree</b>	<a href="#">domain-name</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**hostname** *string*

<b>Description</b>	Host Name option of the dhcp client - option 12
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options hostname</a> <i>string</i>

<b>Tree</b>	<a href="#">hostname</a>
<b>String Length</b>	1 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ntp-server string**

<b>Description</b>	List of NTP Servers to return to the dhcp client - option 42
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 options ntp-server string</a>
<b>Tree</b>	<a href="#">ntp-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

**router string**

<b>Description</b>	IPv4 address of the gateway for the dhcp client - option 3
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 options router string</a>
<b>Tree</b>	<a href="#">router</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**server-id string**

<b>Description</b>	IP address the dhcp server must match any address within the network_instance e.g. sub-interface primary address, loopback address, anycast gateway address in case of multihoming - option 54
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 options server-id string</a>
<b>Tree</b>	<a href="#">server-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tftp-server-address** *string*

<b>Description</b>	List of IP address of the TFTP servers the client will use to download bootfile/configuration script - option 150
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options tftp-server-address</a> <i>string</i>
<b>Tree</b>	<a href="#">tftp-server-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	2

**tftp-server-name** *string*

<b>Description</b>	FQDN of the TFTP server the client will use to download bootfile/configuration script - option 66
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 options tftp-server-name</a> <i>string</i>
<b>Tree</b>	<a href="#">tftp-server-name</a>
<b>String Length</b>	1 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**static-allocation**

<b>Description</b>	Enter the static-allocation context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation</a>
<b>Tree</b>	<a href="#">static-allocation</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**host** [mac](#) *string*

<b>Description</b>	host name for static ip allocations
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i>
<b>Tree</b>	<a href="#">host</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac string**

<b>Description</b>	Enter the mac context
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 static-allocation host mac string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ip-address string**

<b>Description</b>	Enter the ip-address context
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 static-allocation host mac string ip-address string</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**options**

<b>Description</b>	Enter the options context
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 static-allocation host mac string options</a>
<b>Tree</b>	<a href="#">options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bootfile-name string**

<b>Description</b>	The name of the configuration file the client will use during booting - option 67
<b>Context</b>	<a href="#">system dhcp-server network-instance name reference dhcpv4 static-allocation host mac string options bootfile-name string</a>
<b>Tree</b>	<a href="#">bootfile-name</a>
<b>String Length</b>	1 to 128

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dns-server** *string*

<b>Description</b>	An Ordered List of DNS servers to return to the dhcp client - option 6
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string options dns-server string</i>
<b>Tree</b>	<a href="#">dns-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

**domain-name** *string*

<b>Description</b>	The domain name to return to the dhcp client that the client should use when resolving hostnames via the Domain Name System - option 15
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string options domain-name string</i>
<b>Tree</b>	<a href="#">domain-name</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**hostname** *string*

<b>Description</b>	Host Name option of the dhcp client - option 12
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string options hostname string</i>
<b>Tree</b>	<a href="#">hostname</a>
<b>String Length</b>	1 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ntp-server** *string*

<b>Description</b>	List of NTP Servers to return to the dhcp client - option 42
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<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i> <a href="#">ntp-server</a> <i>string</i>
<b>Tree</b>	<a href="#">ntp-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

**router** *string*

<b>Description</b>	IPv4 address of the gateway for the dhcp client - option 3
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i> <a href="#">options router</a> <i>string</i>
<b>Tree</b>	<a href="#">router</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**server-id** *string*

<b>Description</b>	IP address the dhcp server must match any address within the network_instance e.g. sub-interface primary address, loopback address, anycast gateway address in case of multihoming - option 54
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i> <a href="#">options server-id</a> <i>string</i>
<b>Tree</b>	<a href="#">server-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tftp-server-address** *string*

<b>Description</b>	List of IP address of the TFTP servers the client will use to download bootfile/configuration script - option 150
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i> <a href="#">options tftp-server-address</a> <i>string</i>
<b>Tree</b>	<a href="#">tftp-server-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	2

**tftp-server-name** *string*

<b>Description</b>	FQDN of the TFTP server the client will use to download bootfile/ configuration script - option 66
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 static-allocation host mac</a> <i>string</i> <a href="#">options tftp-server-name</a> <i>string</i>
<b>Tree</b>	<a href="#">tftp-server-name</a>
<b>String Length</b>	1 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-discarded** *number*

<b>Description</b>	Total discarded dhcp packets from dhcp client(s)
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 statistics client-packets-discarded</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-discarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-received** *number*

<b>Description</b>	Total received dhcp packets from dhcp client(s)
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv4 statistics client-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **server-packets-sent** *number*

**Description** Total dhcp packets sent from DHCP server towards dhcp client(s)

**Context** [system dhcp-server network-instance name reference dhcpv4 statistics server-packets-sent number](#)

**Tree** [server-packets-sent](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **trace-options**

**Description** Container for tracing DHCP server operations instance

**Context** [system dhcp-server network-instance name reference dhcpv4 trace-options](#)

**Tree** [trace-options](#)

**Configurable** True

**Platforms** Supported on all platforms

### **trace** *keyword*

**Description** List of events to trace

**Context** [system dhcp-server network-instance name reference dhcpv4 trace-options trace keyword](#)

**Tree** [trace](#)

**Options**

- messages  
Capture all DHCP server messages sent and received

**Configurable** True

**Platforms** Supported on all platforms

### **dhcpv6**

**Description** Enter the dhcpv6 context

**Context** [system dhcp-server network-instance name reference dhcpv6](#)

**Tree** [dhcpv6](#)

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the dhcp server
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	Details if the dhcp server is operationally available
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing</li> </ul>

- Component is currently being synchronized
- upgrading
  - Component is currently being upgraded
- low-power
  - Component is offline due to insufficient system power
- degraded
  - Component or process is in a degraded state
- warm-reboot
  - Component or process is currently warm rebooting
  - This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
  - Component or process is currently waiting
  - This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## options

<b>Description</b>	Enter the options context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 options</a>
<b>Tree</b>	<a href="#">options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dns-server *string*

<b>Description</b>	An Ordered List of DNS servers to return to the dhcp client
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 options dns-server</a> <i>string</i>
<b>Tree</b>	<a href="#">dns-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

## static-allocation

<b>Description</b>	Enter the static-allocation context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation</a>
<b>Tree</b>	<a href="#">static-allocation</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## host [mac string](#)

<b>Description</b>	host name for static ip allocations
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation host mac string</a>
<b>Tree</b>	<a href="#">host</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## mac [string](#)

<b>Description</b>	Enter the mac context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation host mac string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ip-address [string](#)

<b>Description</b>	Enter the ip-address context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation host mac string ip-address string</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**options**

<b>Description</b>	Enter the options context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation host mac</a> <i>string</i> <a href="#">options</a>
<b>Tree</b>	<a href="#">options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dns-server** *string*

<b>Description</b>	An Ordered List of DNS servers to return to the dhcp client
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 static-allocation host mac</a> <i>string</i> <a href="#">options dns-server</a> <i>string</i>
<b>Tree</b>	<a href="#">dns-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	4

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-discarded** *number*

<b>Description</b>	Total discarded dhcp packets from dhcp client(s)
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 statistics client-packets-discarded</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-discarded</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**client-packets-received** *number*

<b>Description</b>	Total received dhcp packets from dhcp client(s)
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 statistics client-packets-received</a> <i>number</i>
<b>Tree</b>	<a href="#">client-packets-received</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**server-packets-sent** *number*

<b>Description</b>	Total dhcp packets sent from DHCP server towards dhcp client(s)
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 statistics server-packets-sent</a> <i>number</i>
<b>Tree</b>	<a href="#">server-packets-sent</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**trace-options**

<b>Description</b>	Container for tracing DHCP server operations instance
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**trace** *keyword*

<b>Description</b>	List of events to trace
<b>Context</b>	<a href="#">system dhcp-server network-instance name</a> <i>reference</i> <a href="#">dhcpv6 trace-options trace</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>messages Capture all DHCP server messages sent and received</li> </ul>



<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dns

<b>Description</b>	Top-level container for DNS configuration and state
<b>Context</b>	<a href="#">system dns</a>
<b>Tree</b>	<a href="#">dns</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## host-entry [name string](#)

<b>Description</b>	List of static host entries
<b>Context</b>	<a href="#">system dns host-entry name string</a>
<b>Tree</b>	<a href="#">host-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## name [string](#)

<b>Description</b>	Name of host entry
<b>Context</b>	<a href="#">system dns host-entry name string</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ipv4-address [string](#)

<b>Description</b>	IPv4 address for the host entry
<b>Context</b>	<a href="#">system dns host-entry name string ipv4-address string</a>
<b>Tree</b>	<a href="#">ipv4-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-address** *string*

<b>Description</b>	IPv6 address for the host entry
<b>Context</b>	<a href="#">system dns host-entry name</a> <i>string</i> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance** *reference*

<b>Description</b>	Reference to a configured network-instance to source DNS requests from
<b>Context</b>	<a href="#">system dns network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	Details the operational state of the DNS client
<b>Context</b>	<a href="#">system dns oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> </ul>

- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **search-list** *string*

<b>Description</b>	An ordered list of domains to search when resolving a host name
<b>Context</b>	<a href="#">system dns search-list</a> <i>string</i>
<b>Tree</b>	<a href="#">search-list</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **server-list** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	List of the DNS servers that the resolver should query
<b>Context</b>	<a href="#">system dns server-list</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">server-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**Max. Elements** 3

### **source-address** (*ipv4-address* | *ipv6-address*)

**Description** Source address for DNS to use for messages sent to a remote server

**Context** [system dns source-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [source-address](#)

**Configurable** True

**Platforms** Supported on all platforms

### **event-handler**

**Description** Top-level container for configuration and state of event handler and event handling instances

**Context** [system event-handler](#)

**Tree** [event-handler](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **instance name** *string*

**Description** List of all event handler instances

An event handler instance consists of a set of paths to be monitored for changes, and a Python script to execute if changes occur.

**Context** [system event-handler instance name](#) *string*

**Tree** [instance](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**Max. Elements** 20

**name** *string*

<b>Description</b>	A user-defined name for this event handler instance
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable this event handler instance
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-errored-execution**

<b>Description</b>	Operational state of the last errored execution of this instance
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <b>last-errored-execution</b>
<b>Tree</b>	<a href="#">last-errored-execution</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-time string**

<b>Description</b>	The time this instance last finished execution This timestamp includes any actions provided as output from the execution
<b>Context</b>	<a href="#">system event-handler instance name string last-errored-execution end-time string</a>
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**input string**

<b>Description</b>	The input provided to the script
<b>Context</b>	<a href="#">system event-handler instance name string last-errored-execution input string</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason keyword**

<b>Description</b>	The reason this instance is or was in its last operational state
<b>Context</b>	<a href="#">system event-handler instance name string last-errored-execution oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>admin-disabled Event handler instance is admin-disabled</li> <li>failed-to-compile Event handler failed to compile the script, indicating that the script likely has a syntax error</li> <li>exception Event handler caught an exception in the last execution of the script</li> </ul>

- **timeout**  
The last execution of the script did not complete before a timeout occurred
- **subscription-failed**  
Event handler was unable to subscribe to the provided paths
- **script-unavailable**  
Event handler was unable to find the script on the filesystem
- **script-error**  
The script returned something invalid
- **missing-function**  
Event handler was unable to find a function named `event_handler_main()` in the provided script
- **system-error**  
There was a failure in setting up the python environment
- **ephemeral-action-failed**  
Event handler was unable to perform a ephemeral-path action in the previous execution
- **cfg-action-failed**  
Event handler was unable to perform a cfg-path action in the previous execution
- **tools-action-failed**  
Event handler was unable to perform a tools-path action in the previous execution
- **state-action-failed**  
Event handler was unable to perform a state-path action in the previous execution
- **script-action-failed**  
Event handler was unable to perform a script action in the previous execution

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason-detail** *string***Description**

Any additional detail event handler can provide around the last operational state of this instance

<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-errored-execution oper-down-reason-detail</a> <i>string</i>
<b>Tree</b>	<a href="#">oper-down-reason-detail</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**output** *string*

<b>Description</b>	The output received from the script If empty, no response was received.
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-errored-execution output</a> <i>string</i>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	The time this instance last started execution
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-errored-execution start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stdout-stderr** *string*

<b>Description</b>	The output printed on STDOUT or STDERR during this execution
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-errored-execution stdout-stderr</a> <i>string</i>



<b>Tree</b>	<a href="#">stdout-stderr</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **upython-duration** *number*

<b>Description</b>	Time taken for the instance to return output
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-errored-execution</a> <a href="#">upython-duration</a> <i>number</i>
<b>Tree</b>	<a href="#">upython-duration</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-execution**

<b>Description</b>	Operational state of the last execution of this instance
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-execution</a>
<b>Tree</b>	<a href="#">last-execution</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-time** *string*

<b>Description</b>	The time this instance last finished execution This timestamp includes any actions provided as output from the execution
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-execution</a> <a href="#">end-time</a> <i>string</i>
<b>Tree</b>	<a href="#">end-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### input *string*

**Description** The input provided to the script

**Context** [system event-handler instance name](#) *string* [last-execution input](#) *string*

**Tree** [input](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### oper-down-reason *keyword*

**Description** The reason this instance is or was in its last operational state

**Context** [system event-handler instance name](#) *string* [last-execution oper-down-reason](#) *keyword*

**Tree** [oper-down-reason](#)

**Options**

- admin-disabled  
Event handler instance is admin-disabled
- failed-to-compile  
Event handler failed to compile the script, indicating that the script likely has a syntax error
- exception  
Event handler caught an exception in the last execution of the script
- timeout  
The last execution of the script did not complete before a timeout occurred
- subscription-failed  
Event handler was unable to subscribe to the provided paths
- script-unavailable  
Event handler was unable to find the script on the filesystem
- script-error  
The script returned something invalid
- missing-function

Event handler was unable to find a function named `event_handler_main()` in the provided script

- `system-error`

There was a failure in setting up the python environment

- `ephemeral-action-failed`

Event handler was unable to perform a `ephemeral-path` action in the previous execution

- `cfg-action-failed`

Event handler was unable to perform a `cfg-path` action in the previous execution

- `tools-action-failed`

Event handler was unable to perform a `tools-path` action in the previous execution

- `state-action-failed`

Event handler was unable to perform a `state-path` action in the previous execution

- `script-action-failed`

Event handler was unable to perform a `script` action in the previous execution

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason-detail *string***

**Description**

Any additional detail event handler can provide around the last operational state of this instance

**Context**

[system](#) [event-handler](#) [instance name](#) *string* [last-execution](#) [oper-down-reason-detail](#) *string*

**Tree**

[oper-down-reason-detail](#)

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**output string**

<b>Description</b>	The output received from the script If empty, no response was received.
<b>Context</b>	<a href="#">system event-handler instance name string last-execution output string</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time string**

<b>Description</b>	The time this instance last started execution
<b>Context</b>	<a href="#">system event-handler instance name string last-execution start-time string</a>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**stdout-stderr string**

<b>Description</b>	The output printed on STDOUT or STDERR during this execution
<b>Context</b>	<a href="#">system event-handler instance name string last-execution stdout-stderr string</a>
<b>Tree</b>	<a href="#">stdout-stderr</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**upython-duration number**

<b>Description</b>	Time taken for the instance to return output
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<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">last-execution upython-duration number</a>
<b>Tree</b>	<a href="#">upython-duration</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Details if this event handler instance is operationally available
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> </ul>

- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**options****Description**

Options to be passed on each execution of the script

**Context**[system event-handler instance name](#) *string options***Tree**[options](#)**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**object name** *string***Description**

Enter the object list instance

**Context**[system event-handler instance name](#) *string options object name string***Tree**[object](#)**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	The name of this object
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">options object name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value** *string*

<b>Description</b>	A single value to associate with this object
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">options object name</a> <i>string</i> <a href="#">value</a> <i>string</i>
<b>Tree</b>	<a href="#">value</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**values** *string*

<b>Description</b>	List of values to associate with this object, these are serialized as a JSON array when provided as input to the script
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">options object name</a> <i>string</i> <a href="#">values</a> <i>string</i>
<b>Tree</b>	<a href="#">values</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**paths** *string*

<b>Description</b>	List of valid YANG paths in CLI notation to monitor for changes
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If any events are received on any of the provided paths, the configured script will be executed.

This path may include keys, wildcards, ranges, and other management server supported constructs.

E.g. "interface \* oper-state" "acl ipv4-filter foo\* description"

<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">paths</a> <i>string</i>
<b>Tree</b>	<a href="#">paths</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	36

## statistics

<b>Description</b>	Top-level container for event handler statistics
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## execution-count *number*

<b>Description</b>	Indicates the total number of executions of this script
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics execution-count</a> <i>number</i>
<b>Tree</b>	<a href="#">execution-count</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**execution-errors** *number*

<b>Description</b>	Indicates the total number of errors in executions of this script
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics execution-errors number</a>
<b>Tree</b>	<a href="#">execution-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**execution-successes** *number*

<b>Description</b>	Indicates the total number of successful executions of this script
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics execution-successes number</a>
<b>Tree</b>	<a href="#">execution-successes</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**execution-timeouts** *number*

<b>Description</b>	Indicates the total number of timeouts in executions of this script
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics execution-timeouts number</a>
<b>Tree</b>	<a href="#">execution-timeouts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**upython-duration** *number*

<b>Description</b>	Total time taken for all executions of this script to return output
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics upython-duration number</a>
<b>Tree</b>	<a href="#">upython-duration</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**upython-script** *string*

<b>Description</b>	File name of a MicroPython script, including .py suffix This script should exist in /etc/opt/srlinux/eventmgr or /opt/srlinux/eventmgr already. Explicit paths outside of these two directories are not permitted.
<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">upython-script string</a>
<b>Tree</b>	<a href="#">upython-script</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**run-as-user** *reference*

<b>Description</b>	The user to run event handler instances as If no user is configured, scripts are executed as the 'admin' user.
<b>Context</b>	<a href="#">system event-handler run-as-user reference</a>
<b>Tree</b>	<a href="#">run-as-user</a>
<b>Reference</b>	<a href="#">system aaa authentication user username string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**features** *string*

<b>Description</b>	Features enabled on this platform
<b>Context</b>	<a href="#">system features</a> <i>string</i>
<b>Tree</b>	<a href="#">features</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**ftp-server**

<b>Description</b>	Top-level container for FTP server configuration and state
<b>Context</b>	<a href="#">system ftp-server</a>
<b>Tree</b>	<a href="#">ftp-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance** [name](#) *reference*

<b>Description</b>	List of network-instances to run an FTP server in
<b>Context</b>	<a href="#">system ftp-server network-instance name</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *reference*

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">system ftp-server network-instance name</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Enables or disables the FTP server in this network-instance
<b>Context</b>	<a href="#">system ftp-server network-instance name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"><li>• enable</li><li>• disable</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	Details the operational state of the FTP server
<b>Context</b>	<a href="#">system ftp-server network-instance name</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power</li></ul>

Component is offline due to insufficient system power

- degraded

Component or process is in a degraded state

- warm-reboot

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

### **session-limit** *number*

**Description**

Set a limit on the number of simultaneous active FTP sessions

**Context**

[system ftp-server network-instance name](#) *reference* [session-limit number](#)

**Tree**

[session-limit](#)

**Default**

20

**Configurable**

True

**Platforms**

Supported on all platforms

### **source-address** (*ipv4-address* | *ipv6-address*)

**Description**

IPv4 or IPv6 address for the FTP server to listen on within the network-instance

Default behavior is to listen on '::', which will listen on all addresses for both IPv4 and IPv6. In order to listen on IPv4 only, this field should be set to '0.0.0.0'.

**Context**

[system ftp-server network-instance name](#) *reference* [source-address \(ipv4-address | ipv6-address\)](#)

**Tree**

[source-address](#)

**Default**

::

**Configurable**

True

**Platforms**

Supported on all platforms

**timeout** *number*

<b>Description</b>	Set the idle timeout in seconds on FTP connections
<b>Context</b>	<a href="#">system ftp-server network-instance name</a> <i>reference</i> <a href="#">timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Default</b>	300
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**grpc-server** *name string*

<b>Description</b>	List of configured gRPC server instances
<b>Context</b>	<a href="#">system grpc-server</a> <i>name string</i>
<b>Tree</b>	<a href="#">grpc-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	User-provided name of this server instance
<b>Context</b>	<a href="#">system grpc-server</a> <i>name string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Globally enable or disable the gRPC server instance Disabling this will disable all gRPC server sockets in all network instances, and any configured unix domain sockets.
--------------------	--

<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## certz

<b>Description</b>	Information relating to the active certificate and bundle/s as provided via Certz  State is provided by the gNSI Certz service, and can be changed using the gNSI.Certz.Rotate RPC
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz</a>
<b>Tree</b>	<a href="#">certz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## certificate

<b>Description</b>	State relating to the active certificate provided via Certz
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz</a> <a href="#">certificate</a>
<b>Tree</b>	<a href="#">certificate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy  The maps to the created_on field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name string certz certificate created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s  The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name string certz certificate version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**crl**

<b>Description</b>	State relating to the active certificate revocation list provided via Certz  The list of certificates provided will not be used to validate mTLS or servers, even if those certificates exist within the trust anchor.
<b>Context</b>	<a href="#">system grpc-server name string certz crl</a>
<b>Tree</b>	<a href="#">crl</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **created-on** *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy  The maps to the created_on field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz crl</a> <a href="#">created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **version** *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s  The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz crl</a> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ssl-profile-id** *string*

<b>Description</b>	The ID of this gRPC server's SSL profile as used by the gNSI Certz service
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz ssl-profile-id</a> <i>string</i>
<b>Tree</b>	<a href="#">ssl-profile-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## trust-anchor

<b>Description</b>	State relating to the active trust anchor provided via Certz  This is equivalent to the certificate authority bundle, and is the list of certificates used to validate clients in mTLS, and to validate servers in outbound TLS.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz trust-anchor</a>
<b>Tree</b>	<a href="#">trust-anchor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy  The maps to the created_on field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz trust-anchor</a> <a href="#">created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s  The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">certz trust-anchor</a> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### client id number

<b>Description</b>	List of active gRPC client sessions
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id number</a>
<b>Tree</b>	<a href="#">client</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### id number

<b>Description</b>	System generated ID for for the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id number</a>
<b>Range</b>	0 to 4294967295
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### acctz-starting-point string

<b>Description</b>	Time of the acctz accounting subscription starting point
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id number</a> <a href="#">acctz-starting-point</a> <i>string</i>
<b>Tree</b>	<a href="#">acctz-starting-point</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**election-id string**

<b>Description</b>	Election ID of this client Provided only for services supporting an election ID
<b>Context</b>	<a href="#">system grpc-server name string client id number election-id string</a>
<b>Tree</b>	<a href="#">election-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gnmi**

<b>Description</b>	Container for gNMI related session info
<b>Context</b>	<a href="#">system grpc-server name string client id number gnmi</a>
<b>Tree</b>	<a href="#">gnmi</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**paths id number**

<b>Description</b>	List of paths being subscribed to
<b>Context</b>	<a href="#">system grpc-server name string client id number gnmi paths id number</a>
<b>Tree</b>	<a href="#">paths</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	System generated ID for the subscribed path (within subscription)
<b>Context</b>	<a href="#">system grpc-server name string client id number gnmi paths id number</a>

<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mode** *keyword*

<b>Description</b>	Subscription mode (on-change, sample, target-defined, poll, once)
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">gnmi paths id</a> <i>number</i> <b>mode</b> <i>keyword</i>
<b>Tree</b>	<a href="#">mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ON_CHANGE</li> <li>• SAMPLE</li> <li>• TARGET_DEFINED</li> <li>• POLL</li> <li>• ONCE</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path** *string*

<b>Description</b>	Path being subscribed to
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">gnmi paths id</a> <i>number</i> <b>path</b> <i>string</i>
<b>Tree</b>	<a href="#">path</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sample-interval** *number*

<b>Description</b>	Time in seconds to provide updates to the remote host, set to 0 for all subscription modes except SAMPLE
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">gnmi paths id</a> <i>number</i> <a href="#">sample-interval</a> <i>number</i>
<b>Tree</b>	<a href="#">sample-interval</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gribi**

<b>Description</b>	Container for gRIBI related session info
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">gribi</a>
<b>Tree</b>	<a href="#">gribi</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**persistence-mode** *keyword*

<b>Description</b>	The defined persistence mode as signaled by the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">gribi persistence-mode</a> <i>keyword</i>
<b>Tree</b>	<a href="#">persistence-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>preserve</b> Entries populated by the client will be persisted during a client disconnect, or control module switchover</li> <li>• <b>delete</b> Entries populated by the client will be purged on the client disconnecting, or a control module switchover If no persistence mode is signaled, the default is to delete entries.</li> </ul>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## p4rt

**Description** Container for P4RT related session info

**Context** [system grpc-server name string client id number p4rt](#)

**Tree** [p4rt](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## forwarding-complex

**Description** Enter the forwarding-complex context

**Context** [system grpc-server name string client id number p4rt forwarding-complex](#)

**Tree** [forwarding-complex](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## device *number*

**Description** The P4Runtime ID of the forwarding complex for which this client has established itself

This is the value configured at /platform/linecard/forwarding-complex/p4rt/id, or a system derived default.

**Context** [system grpc-server name string client id number p4rt forwarding-complex device number](#)

**Tree** [device](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **id string**

<b>Description</b>	The normalized ID for this forwarding-complex  This is the slot number and complex number separated by a '/', 0 indexed. For example '1/0', or '1/1' representing two forwarding complexes on slot 1.
<b>Context</b>	<a href="#">system grpc-server name string client id number p4rt forwarding-complex id string</a>
<b>Tree</b>	<a href="#">id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **slot number**

<b>Description</b>	The linecard slot for which this forwarding complex resides on
<b>Context</b>	<a href="#">system grpc-server name string client id number p4rt forwarding-complex slot number</a>
<b>Tree</b>	<a href="#">slot</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **primary boolean**

<b>Description</b>	Indicates if this client is the primary for the specified forwarding complex  Only a single primary per forwarding complex is supported
<b>Context</b>	<a href="#">system grpc-server name string client id number p4rt primary boolean</a>
<b>Tree</b>	<a href="#">primary</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**remote-host** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Remote host of the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">remote-host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">remote-host</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-port** *number*

<b>Description</b>	Remote port of the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">remote-port</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-port</a>
<b>Range</b>	0 to 65535
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rpc** *string*

<b>Description</b>	The called package, service, and RPC For example gnmi.gNMI.Subscribe
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">rpc</a> <i>string</i>
<b>Tree</b>	<a href="#">rpc</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-time** *string*

<b>Description</b>	Time of the subscription creation
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<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">start-time</a> <i>string</i>
<b>Tree</b>	<a href="#">start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• gnmi</li> <li>• acctz</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user** *string*

<b>Description</b>	Authenticated username for the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">user</a> <i>string</i>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user-agent** *string*

<b>Description</b>	User agent used for the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i> <a href="#">user-agent</a> <i>string</i>
<b>Tree</b>	<a href="#">user-agent</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### default-tls-profile *boolean*

<b>Description</b>	Whether to use default TLS profile (generated by the system) if none is configured via <code>tls-profile</code> field
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <code>default-tls-profile</code> <i>boolean</i>
<b>Tree</b>	<a href="#">default-tls-profile</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### gnmi

<b>Description</b>	Container for gnmi configuration and state
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <code>gnmi</code>
<b>Tree</b>	<a href="#">gnmi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### commit-confirmed-timeout *number*

<b>Description</b>	Number of seconds to wait for confirmation A value of 0 means commit confirmed is not used
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnmi</a> <code>commit-confirmed-timeout</code> <i>number</i>
<b>Tree</b>	<a href="#">commit-confirmed-timeout</a>
<b>Range</b>	0 to 86400
<b>Default</b>	0
<b>Units</b>	seconds

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **commit-save** *boolean*

<b>Description</b>	Specifies whether to save startup configuration after every successful commit
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnmi commit-save</a> <i>boolean</i>
<b>Tree</b>	<a href="#">commit-save</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **include-defaults-in-config-only-responses** *boolean*

<b>Description</b>	Specifies whether to include field default values in get/subscribe responses when using configuration only datastore (for example running/intended datastore)
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnmi include-defaults-in-config-only-responses</a> <i>boolean</i>
<b>Tree</b>	<a href="#">include-defaults-in-config-only-responses</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **max-concurrent-streams** *number*

<b>Description</b>	Set a limit on the number of concurrent gRPC streams
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">max-concurrent-streams</a> <i>number</i>
<b>Tree</b>	<a href="#">max-concurrent-streams</a>
<b>Range</b>	0 to 2147483647

<b>Default</b>	65535
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### metadata-authentication *boolean*

<b>Description</b>	Enable or disable the use of username/password metadata authentication for every gRPC request
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">metadata-authentication</a> <i>boolean</i>
<b>Tree</b>	<a href="#">metadata-authentication</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance *reference*

<b>Description</b>	Reference to a configured network instance where the gRPC will listen on for incoming connections
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### oper-state *keyword*

<b>Description</b>	Details if the gRPC server is operationally available
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>up Component or process is operational</li> <li>down</li> </ul>

- Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pathz****Description**

Information relating to the active Pathz authorization policy instances

This policies is provided by the gNSI gRPC service, and can be changed using the gNSI.Pathz.Rotate RPC

<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz</a>
<b>Tree</b>	<a href="#">pathz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## counters

<b>Description</b>	A collection of per-schema path counters collected by the gNSI.pathz module.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz</a> <a href="#">counters</a>
<b>Tree</b>	<a href="#">counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [path name](#) *string*

<b>Description</b>	A collection of counters collected by the gNSI.pathz module for a schema path identified by the `name`.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz</a> <a href="#">counters</a> <a href="#">path name</a> <i>string</i>
<b>Tree</b>	<a href="#">path</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [name](#) *string*

<b>Description</b>	A schema path the counters were collected for. Uses xpath format.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz</a> <a href="#">counters</a> <a href="#">path name</a> <i>string</i>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## reads

<b>Description</b>	The counter were collected while performing a read operation on the schema path.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz counters path name</a> <i>string</i> <a href="#">reads</a>
<b>Tree</b>	<a href="#">reads</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## access-accepts number

<b>Description</b>	The total number of times the gNSI.pathz module allowed access to a schema path.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz counters path name</a> <i>string</i> <a href="#">reads</a> <a href="#">access-accepts</a> <i>number</i>
<b>Tree</b>	<a href="#">access-accepts</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## access-rejects number

<b>Description</b>	The total number of times the gNSI.pathz module denied access to a schema path.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz counters path name</a> <i>string</i> <a href="#">reads</a> <a href="#">access-rejects</a> <i>number</i>
<b>Tree</b>	<a href="#">access-rejects</a>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-access-accept *string*

**Description** A timestamp of the last time the gNSI.pathz allowed access to a schema path.

**Context** [system grpc-server name string pathz counters path name string reads last-access-accept string](#)

**Tree** [last-access-accept](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-access-reject *string*

**Description** A timestamp of the last time the gNSI.pathz denied access to a schema path.

**Context** [system grpc-server name string pathz counters path name string reads last-access-reject string](#)

**Tree** [last-access-reject](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### writes

**Description** The counter were collected while performing a write operation on the schema path.

**Context** [system grpc-server name string pathz counters path name string writes](#)

**Tree** [writes](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-accepts number**

**Description** The total number of times the gNSI.pathz module allowed access to a schema path.

**Context** [system grpc-server name string pathz counters path name string writes access-accepts number](#)

**Tree** [access-accepts](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-rejects number**

**Description** The total number of times the gNSI.pathz module denied access to a schema path.

**Context** [system grpc-server name string pathz counters path name string writes access-rejects number](#)

**Tree** [access-rejects](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-access-accept string**

**Description** A timestamp of the last time the gNSI.pathz allowed access to a schema path.

**Context** [system grpc-server name string pathz counters path name string writes last-access-accept string](#)

**Tree** [last-access-accept](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-access-reject *string*

**Description** A timestamp of the last time the gNSI.pathz denied access to a schema path.

**Context** [system grpc-server name string pathz counters path name string writes last-access-reject string](#)

**Tree** [last-access-reject](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### created-on *string*

**Description** The timestamp of the moment when the Pathz policy was created (sent by the gNSI client).

**Context** [system grpc-server name string pathz created-on string](#)

**Tree** [created-on](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### policy *string*

**Description** The policy definition

This JSON string contains the full gRPC authorization policy conforming to the gRPC Path-based authorization policy schema.

This maps to the policy field within a UploadRequest message in the Pathz protobuf.

**Context** [system grpc-server name string pathz policy string](#)

<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version of the Pathz authorization policy (sent by the gNSI client).
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">pathz</a> <i>version string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port number**

<b>Description</b>	Port the gRPC server will listen on for incoming connections
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">port</a> <i>number</i>
<b>Tree</b>	<a href="#">port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	57400
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rate-limit number**

<b>Description</b>	Set a limit on the number of RPC calls per minute
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">rate-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">rate-limit</a>
<b>Range</b>	0 to 65535
<b>Default</b>	60

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### services *identityref*

<b>Description</b>	The gRPC service definitions that should be enabled for this gRPC server instance
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">services identityref</a>
<b>Tree</b>	<a href="#">services</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• gnmi gNMI: gRPC Network Management Interface</li> <li>• gnoi gNOI: gRPC Network Operations Interface</li> <li>• gnoi.bgp gNOI: BGP Service</li> <li>• gnoi.factory_reset gNOI: FactoryReset Service</li> <li>• gnoi.file gNOI: File Service</li> <li>• gnoi.healthz gNOI: Healthz Service</li> <li>• gnoi.os gNOI: OS Service</li> <li>• gnoi.packet_link_qualification gNOI: PacketLinkQualification Service</li> <li>• gnoi.system gNOI: System Service</li> <li>• gnsi gNSI: gRPC Network Security Interface</li> <li>• gnsi.acctz gNSI: Accounting Service</li> <li>• gnsi.attestz gNSI: Attestz Service</li> <li>• gnsi.authz</li> </ul>

	<ul style="list-style-type: none"> <li>gNSI: Authorization Policy Management Service</li> <li>• gnsi.certz gNSI: Certificate Management Service</li> <li>• gnsi.credentialz gNSI: Credentials Management Service</li> <li>• gnsi.enrollz gNSI: Enrollz Service</li> <li>• gnsi.pathz gNSI: Path-based Authorization Policy Management Service</li> <li>• gribi gRIBI: gRPC Routing Information Base Interface</li> <li>• p4rt P4RT: P4 Runtime</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **session-limit** *number*

<b>Description</b>	<p>Set a limit on the number of simultaneous active gRPC sessions</p> <p>A session is defined as an individual RPC invocation, which could result in a single client generating multiple sessions. In the context of a Subscribe RPC this is the number of simultaneously active SubscribeRequests across all Subscribe RPCs.</p>
<b>Context</b>	<code>system grpc-server name string session-limit number</code>
<b>Tree</b>	<code>session-limit</code>
<b>Range</b>	0 to 65535
<b>Default</b>	20
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	List of IP addresses the gRPC server will listen on within the network instance
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Default</b>	::
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Statistics related to the gRPC server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**access-accepts** *number*

<b>Description</b>	The total number of times the gRPC allowed access to the server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics</a> <a href="#">access-accepts</a> <i>number</i>
<b>Tree</b>	<a href="#">access-accepts</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**access-rejects** *number*

<b>Description</b>	The total number of times the gRPC server denied access to the server
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<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics access-rejects</a> <i>number</i>
<b>Tree</b>	<a href="#">access-rejects</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-access-accept** *string*

<b>Description</b>	A timestamp of the last time the gRPC allowed access to the server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics last-access-accept</a> <i>string</i>
<b>Tree</b>	<a href="#">last-access-accept</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-access-reject** *string*

<b>Description</b>	A timestamp of the last time the gRPC server denied access to the server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics last-access-reject</a> <i>string</i>
<b>Tree</b>	<a href="#">last-access-reject</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rpc name** *string*

<b>Description</b>	A collection of counters collected by the gNSI.authz module for a RPC identified by the `name`.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics rpc name</a> <i>string</i>
<b>Tree</b>	<a href="#">rpc</a>
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

**Description** The name of the RPC the counters were collected for.

**Context** [system](#) [grpc-server name](#) *string* [statistics](#) [rpc name](#) *string*

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-accepts** *number*

**Description** The total number of times the gNSI.authz module allowed access to a RPC.

**Context** [system](#) [grpc-server name](#) *string* [statistics](#) [rpc name](#) *string* [access-accepts](#) *number*

**Tree** [access-accepts](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-rejects** *number*

**Description** The total number of times the gNSI.authz module denied access to a RPC.

**Context** [system](#) [grpc-server name](#) *string* [statistics](#) [rpc name](#) *string* [access-rejects](#) *number*

**Tree** [access-rejects](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-access-accept *string***

<b>Description</b>	A timestamp of the last time the gNSI.authz allowed access to a RPC.
<b>Context</b>	<a href="#">system</a> <a href="#">grpc-server name</a> <i>string</i> <a href="#">statistics</a> <a href="#">rpc name</a> <i>string</i> <b>last-access-accept</b> <i>string</i>
<b>Tree</b>	<a href="#">last-access-accept</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-access-reject *string***

<b>Description</b>	A timestamp of the last time the gNSI.authz denied access to a RPC.
<b>Context</b>	<a href="#">system</a> <a href="#">grpc-server name</a> <i>string</i> <a href="#">statistics</a> <a href="#">rpc name</a> <i>string</i> <b>last-access-reject</b> <i>string</i>
<b>Tree</b>	<a href="#">last-access-reject</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout *number***

<b>Description</b>	Set the idle timeout in seconds on gRPC connections
<b>Context</b>	<a href="#">system</a> <a href="#">grpc-server name</a> <i>string</i> <b>timeout</b> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	0 to 65535
<b>Default</b>	7200
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tls-profile** *reference*

<b>Description</b>	Reference to the TLS profile to use on the gRPC server If none is specified, then TLS is not used.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">tls-profile</a> <i>reference</i>
<b>Tree</b>	<a href="#">tls-profile</a>
<b>Reference</b>	<a href="#">system tls server-profile name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options** *keyword*

<b>Description</b>	gRPC trace options
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">trace-options</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• request</li> <li>• response</li> <li>• common</li> <li>• grpc</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unix-socket**

<b>Description</b>	Top-level container for configuration and state related to unix sockets
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">unix-socket</a>
<b>Tree</b>	<a href="#">unix-socket</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the gRPC server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">unix-socket</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**socket-path** *string*

<b>Description</b>	Path to the unix socket used by gRPC
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">unix-socket</a> <a href="#">socket-path</a> <i>string</i>
<b>Tree</b>	<a href="#">socket-path</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**yang-models** *keyword*

<b>Description</b>	Specify yang-models to be used when origin field is not present in requests
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">yang-models</a> <i>keyword</i>
<b>Tree</b>	<a href="#">yang-models</a>
<b>Default</b>	native
<b>Options</b>	<ul style="list-style-type: none"> <li>• native</li> <li>• openconfig</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## information

<b>Description</b>	Top-level container for system information configuration and state
<b>Context</b>	<a href="#">system information</a>
<b>Tree</b>	<a href="#">information</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## contact *string*

<b>Description</b>	The system contact  This field represents contact information for the person or group that maintains the system. This field is exposed via SNMP at the sysContact OID.
<b>Context</b>	<a href="#">system information contact <i>string</i></a>
<b>Tree</b>	<a href="#">contact</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## current-datetime *string*

<b>Description</b>	The current system date and time
<b>Context</b>	<a href="#">system information current-datetime <i>string</i></a>
<b>Tree</b>	<a href="#">current-datetime</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## description *string*

<b>Description</b>	The system description  This field is system generated, and is a combination of the system host name, software version, kernel version, and build date. The template for this field is: SRLinux-<version> <hostname> <kernel> <build date>. This field is exposed via SNMP at the sysDescr OID.
<b>Context</b>	<a href="#">system information description <i>string</i></a>
<b>Tree</b>	<a href="#">description</a>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-booted** *string*

<b>Description</b>	The date and time the system was last booted
<b>Context</b>	<a href="#">system information last-booted</a> <i>string</i>
<b>Tree</b>	<a href="#">last-booted</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**location** *string*

<b>Description</b>	The system location  This field represents the location of the system, and is commonly used by inventory management systems to group elements together. This field is exposed via SNMP at the sysLocation OID.
<b>Context</b>	<a href="#">system information location</a> <i>string</i>
<b>Tree</b>	<a href="#">location</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**version** *string*

<b>Description</b>	The system version  This field represents the version of the management server
<b>Context</b>	<a href="#">system information version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**json-rpc-server**

<b>Description</b>	Configures the JSON RPC access API
<b>Context</b>	<a href="#">system json-rpc-server</a>

<b>Tree</b>	<a href="#">json-rpc-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Globally enable or disable the JSON RPC server Disabling this will disable all JSON RPC servers.
<b>Context</b>	<a href="#">system json-rpc-server admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **commit-confirmed-timeout** *number*

<b>Description</b>	Number of seconds to wait for confirmation. A value of 0 means commit confirmed is not used
<b>Context</b>	<a href="#">system json-rpc-server commit-confirmed-timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">commit-confirmed-timeout</a>
<b>Range</b>	0 to 86400
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **network-instance** [name](#) *reference*

<b>Description</b>	List of network instances to run the JSON RPC server in
<b>Context</b>	<a href="#">system json-rpc-server network-instance</a> <a href="#">name</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *reference*

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**http**

<b>Description</b>	Top-level container for the JSON RPC HTTP server
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http</a>
<b>Tree</b>	<a href="#">http</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the HTTP JSON RPC server This requires the JSON RPC server to be globally enabled
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**oper-state** *keyword*

<b>Description</b>	Details if the JSON RPC server is operationally available
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up</li> </ul>



- Component or process is operational
- down
- Component or process is not operational
- empty
- Component slot is empty
- downloading
- Component is downloading image into memory
- booting
- Component is booting downloaded image
- starting
- Component image operational, application processes starting
- failed
- Component or process has failed
- synchronizing
- Component is currently being synchronized
- upgrading
- Component is currently being upgraded
- low-power
- Component is offline due to insufficient system power
- degraded
- Component or process is in a degraded state
- warm-reboot
- Component or process is currently warm rebooting
- This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting
- Component or process is currently waiting
- This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**port number****Description**

The port the HTTP JSON RPC server will listen on for incoming connections

<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http port number</a>
<b>Tree</b>	<a href="#">port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	80
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **session-limit** *number*

<b>Description</b>	The number of concurrent requests the server will allow. If a request comes in while this limit is reached, the request will block until another request is finished.
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http session-limit number</a>
<b>Tree</b>	<a href="#">session-limit</a>
<b>Range</b>	1 to 100
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **source-address** (*ipv4-address | ipv6-address*)

<b>Description</b>	List of IP addresses the JSON RPC server will listen on within the network instance
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http source-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">source-address</a>
<b>Default</b>	::
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **use-authentication** *boolean*

<b>Description</b>	Enable or disable the use of username/password authentication for every JSON RPC request
<b>Context</b>	<a href="#">system json-rpc-server network-instance name reference http use-authentication boolean</a>
<b>Tree</b>	<a href="#">use-authentication</a>
<b>Default</b>	true

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## https

<b>Description</b>	Top-level container for the JSON-RPC HTTPS server
<b>Context</b>	<a href="#">system json-rpc-server network-instance name</a> <i>reference</i> <a href="#">https</a>
<b>Tree</b>	<a href="#">https</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable the HTTPS JSON RPC server This requires the JSON RPC server to be globally enabled
<b>Context</b>	<a href="#">system json-rpc-server network-instance name</a> <i>reference</i> <a href="#">https admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## oper-state *keyword*

<b>Description</b>	Details if the JSON RPC server is operationally available
<b>Context</b>	<a href="#">system json-rpc-server network-instance name</a> <i>reference</i> <a href="#">https oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> </ul>

- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

**port number****Description**

Port the HTTPS JSON RPC server will listen on for incoming connections

**Context**[system json-rpc-server network-instance name](#) *reference* [https port number](#)**Tree**[port](#)**Range**

0 to 65535

**Default**

443

**Configurable**

True

**Platforms** Supported on all platforms

### **session-limit** *number*

**Description** The number of concurrent requests the server will allow. If a request comes in while this limit is reached, the request will block until another request is finished.

**Context** [system json-rpc-server network-instance name](#) *reference* [https://session-limit-number](#)

**Tree** [session-limit](#)

**Range** 1 to 100

**Configurable** True

**Platforms** Supported on all platforms

### **source-address** (*ipv4-address* | *ipv6-address*)

**Description** List of IP addresses the JSON RPC server will listen on within the network instance.

**Context** [system json-rpc-server network-instance name](#) *reference* [https://source-address \(ipv4-address | ipv6-address\)](#)

**Tree** [source-address](#)

**Default** ::

**Configurable** True

**Platforms** Supported on all platforms

### **tls-profile** *reference*

**Description** Reference to the TLS profile to use on the HTTP JSON RPC server.

**Context** [system json-rpc-server network-instance name](#) *reference* [https://tls-profile-reference](#)

**Tree** [tls-profile](#)

**Reference** [system tls server-profile name](#) *string*

**Configurable** True

**Platforms** Supported on all platforms

**use-authentication** *boolean*

<b>Description</b>	Enable or disable the use of username/password authentication for every JSON RPC request
<b>Context</b>	<a href="#">system json-rpc-server network-instance name</a> <i>reference</i> <a href="#">https use-authentication boolean</a>
<b>Tree</b>	<a href="#">use-authentication</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**trace-options** *keyword*

<b>Description</b>	JSON RPC trace options
<b>Context</b>	<a href="#">system json-rpc-server trace-options</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• request</li> <li>• response</li> <li>• common</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**unix-socket**

<b>Description</b>	Top-level container for configuration and state related to unix sockets
<b>Context</b>	<a href="#">system json-rpc-server unix-socket</a>
<b>Tree</b>	<a href="#">unix-socket</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the JSON RPC server via unix socket This requires the JSON RPC server to be globally enabled
<b>Context</b>	<a href="#">system json-rpc-server unix-socket admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>

<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	Details if the JSON RPC server is operationally available
<b>Context</b>	<a href="#">system json-rpc-server unix-socket oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting</li> </ul>

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **socket-path** *string*

<b>Description</b>	Path to the unix socket used by JSON RPC
<b>Context</b>	<a href="#">system json-rpc-server unix-socket socket-path</a> <i>string</i>
<b>Tree</b>	<a href="#">socket-path</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **tls-profile** *reference*

<b>Description</b>	Reference to the TLS profile to use on the JSON RPC unix socket server If none is specified, then TLS is not used.
<b>Context</b>	<a href="#">system json-rpc-server unix-socket tls-profile</a> <i>reference</i>
<b>Tree</b>	<a href="#">tls-profile</a>
<b>Reference</b>	<a href="#">system tls server-profile name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **use-authentication** *boolean*

<b>Description</b>	Enable or disable the use of username/password authentication for every JSON RPC request
<b>Context</b>	<a href="#">system json-rpc-server unix-socket use-authentication</a> <i>boolean</i>
<b>Tree</b>	<a href="#">use-authentication</a>
<b>Default</b>	true
<b>Configurable</b>	True



**Platforms** Supported on all platforms

## I2cp-transparency

**Description** Enclosing container for system level Layer-2 Control Protocol transparency.

**Context** [system I2cp-transparency](#)

**Tree** [I2cp-transparency](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## I2cp-statistics

**Description** Container for Layer-2 Control Plane protocol statistics.

**Context** [system I2cp-transparency I2cp-statistics](#)

**Tree** [I2cp-statistics](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dot1x

**Description** Container for 802.1x protocols.

**Context** [system I2cp-transparency I2cp-statistics dot1x](#)

**Tree** [dot1x](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-trap-to-cpu-packets *number*

**Description** System level incoming 802.1x frames copied to CPU.

Cumulative of all Ethernet interfaces including all the copy-to-cpu 802.1x frames. 802.1x frames are identified by a destination MAC value of 01:80:c2:00:00:03 and EtherType value of 0x888e.

<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics dot1x in-trap-to-cpu-packets number</a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-tunneled-packets number**

<b>Description</b>	System level incoming 802.1x tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled 802.1x frames. 802.1x frames are identified by a destination MAC value of 01:80:c2:00:00:03 and EtherType value of 0x888e.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics dot1x in-tunneled-packets number</a>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear string**

<b>Description</b>	Timestamp of the last time the LACP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics dot1x last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **efm-oam**

<b>Description</b>	Container for Ethernet in the First Mile OAM frames EFM-OAM frames are identified by a Ethertype value 0x8809 and slow protocol subtype 0x03.
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<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics efm-oam</a>
<b>Tree</b>	<a href="#">efm-oam</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-trap-to-cpu-packets** *number*

<b>Description</b>	System level incoming EFM-OAM frames copied to CPU Cumulative of all Ethernet interfaces including all the copy-to-cpu EFM-OAM frames.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics efm-oam in-trap-to-cpu-packets number</a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-tunneled-packets** *number*

<b>Description</b>	System level incoming EFM-OAM tunneled frames Cumulative of all Ethernet interfaces including all the tunneled EFM-OAM frames.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics efm-oam in-tunneled-packets number</a>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear** *string*

<b>Description</b>	Timestamp of the last time the EFM-OAM counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics efm-oam last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## elmi

**Description** Container for Ethernet local management interface frames  
ELMI frames are identified by MAC DA 01-80-C2-00-00-07 and Ethertype 0x88ee.

**Context** [system l2cp-transparency l2cp-statistics elmi](#)

**Tree** [elmi](#)

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-trap-to-cpu-packets *number*

**Description** System level incoming ELMI frames copied to CPU  
Cumulative of all Ethernet interfaces including all the copy-to-cpu ELMI frames.

**Context** [system l2cp-transparency l2cp-statistics elmi in-trap-to-cpu-packets number](#)

**Tree** [in-trap-to-cpu-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-tunneled-packets *number*

**Description** System level incoming ELMI tunneled frames  
Cumulative of all Ethernet interfaces including all the tunneled ELMI frames.

**Context** [system l2cp-transparency l2cp-statistics elmi in-tunneled-packets number](#)

**Tree** [in-tunneled-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-clear *string*

**Description** Timestamp of the last time the ELMI counters were cleared

<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics elmi last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## esmc

<b>Description</b>	Container for Ethernet Synchronization Messaging Channel protocol ESMC frames are identified by a Ethertype 0x8809 and slow protocol subtype 0x0A.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics esmc</a>
<b>Tree</b>	<a href="#">esmc</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-trap-to-cpu-packets *number*

<b>Description</b>	System level incoming ESMC frames copied to CPU Cumulative of all Ethernet interfaces including all the copy-to-cpu ESMC frames.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics esmc in-trap-to-cpu-packets number</a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-tunneled-packets *number*

<b>Description</b>	System level incoming ESMC tunneled frames Cumulative of all Ethernet interfaces including all the tunneled ESMC frames.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics esmc in-tunneled-packets number</a>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear *string***

**Description** Timestamp of the last time the ESMC counters were cleared

**Context** [system l2cp-transparency l2cp-statistics esmc last-clear string](#)

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lACP**

**Description** Container for LACP.

**Context** [system l2cp-transparency l2cp-statistics lACP](#)

**Tree** [lACP](#)

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-trap-to-cpu-packets *number***

**Description** System level incoming Link Aggregation Control Protocol frames copied to CPU.  
Cumulative of all Ethernet interfaces including all the copy-to-cpu LACP frames. LACP frames are identified by a destination MAC value of 01:80:c2:00:00:02, EtherType value of 0x8809 and slow protocol subtype 0x1.

**Context** [system l2cp-transparency l2cp-statistics lACP in-trap-to-cpu-packets number](#)

**Tree** [in-trap-to-cpu-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-tunneled-packets** *number*

<b>Description</b>	System level incoming Link Aggregation Control Protocol tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled LACP frames. LACP frames are identified by a destination MAC value of 01:80:c2:00:00:02, EtherType value of 0x8809 and slow protocol subtype 0x1.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lacp in-tunneled-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the LACP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lacp last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the L2CP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## Ildp

<b>Description</b>	Container for LLDP.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lldp</a>
<b>Tree</b>	<a href="#">lldp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### in-trap-to-cpu-packets *number*

<b>Description</b>	System level incoming Link Layer Discovery Protocol frames copied to CPU. Cumulative of all Ethernet interfaces including all the copy-to-cpu LLDP frames. LLDP frames are identified by a destination MAC value of 01:80:c2:00:00:0e and EtherType value of 0x88cc.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lldp in-trap-to-cpu-packets number</a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### in-tunneled-packets *number*

<b>Description</b>	System level incoming Link Layer Discovery Protocol tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled LLDP frames. LLDP frames are identified by a destination MAC value of 01:80:c2:00:00:0e and EtherType value of 0x88cc.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lldp in-tunneled-packets number</a>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**last-clear *string***

<b>Description</b>	Timestamp of the last time the LACP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics lldp last-clear <i>string</i></a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ptp**

<b>Description</b>	Container for Precision Time Protocol Peer-Delay protocol.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-trap-to-cpu-packets *number***

<b>Description</b>	System level incoming Precision Time Protocol Peer-Delay frames copied to CPU.  Cumulative of all Ethernet interfaces including all the copy-to-cpu PTP frames. PTP frames are identified by a destination MAC value of 01:80:c2:00:00:0e and Ethertype value of 0x88F7.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics ptp in-trap-to-cpu-packets <i>number</i></a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-tunneled-packets** *number*

<b>Description</b>	System level incoming Precision Time Protocol Peer-Delay tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled PTP frames. PTP frames are identified by a destination MAC value of 01:80:c2:00:00:0e and Ethertype value of 0x88F7.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics ptp in-tunneled-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the PTP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics ptp last-clear</a> <i>string</i>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-in-discarded-packets** *number*

<b>Description</b>	System level incoming L2CP discarded frames. Cumulative of all Ethernet interfaces including all the discarded L2CP frames. L2CP frames are identified by a destination MAC value of 01:80:c2:00:00:0X or 01:80:c2:00:00:2X, being X any value in the 0..F range.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics total-in-discarded-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-in-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-in-packets** *number*

<b>Description</b>	System level total incoming L2CP frames. Cumulative of all Ethernet interfaces including the tunneled, discarded and copy-to-cpu L2CP frames. L2CP frames are identified by a destination MAC value of 01:80:c2:00:00:0X or 01:80:c2:00:00:2X, being X any value in the 0..F range.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics total-in-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-in-trap-to-cpu-packets** *number*

<b>Description</b>	System level incoming L2CP copy-to-cpu frames. Cumulative of all Ethernet interfaces including all the L2CP frames that are copied to CPU. L2CP frames are identified by a destination MAC value of 01:80:c2:00:00:0X or 01:80:c2:00:00:2X, being X any value in the 0..F range.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics total-in-trap-to-cpu-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-in-tunneled-packets** *number*

<b>Description</b>	System level incoming L2CP tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled L2CP frames. L2CP frames are identified by a destination MAC value of 01:80:c2:00:00:0X or 01:80:c2:00:00:2X, being X any value in the 0..F range.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics total-in-tunneled-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-in-tunneled-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## xstp

<b>Description</b>	Container for Spanning Tree Protocols.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics xstp</a>
<b>Tree</b>	<a href="#">xstp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-trap-to-cpu-packets *number*

<b>Description</b>	System level incoming Spanning Tree Protocol frames copied to CPU. Cumulative of all Ethernet interfaces including all the copy-to-cpu Spanning Tree frames. Spanning Tree frames are identified by a destination MAC value of 01:80:c2:00:00:00 and LLC value 0x42.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics xstp in-trap-to-cpu-packets number</a>
<b>Tree</b>	<a href="#">in-trap-to-cpu-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## in-tunneled-packets *number*

<b>Description</b>	System level incoming Spanning Tree tunneled frames. Cumulative of all Ethernet interfaces including all the tunneled Spanning Tree frames. xSTP frames are identified by a destination MAC value of 01:80:c2:00:00:00 and LLC value 0x42.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics xstp in-tunneled-packets number</a>
<b>Tree</b>	<a href="#">in-tunneled-packets</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-clear string**

<b>Description</b>	Timestamp of the last time the xSTP counters were cleared.
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-statistics xstp last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **lacp**

<b>Description</b>	Enter the lacp context
<b>Context</b>	<a href="#">system lacp</a>
<b>Tree</b>	<a href="#">lacp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **system-id string**

<b>Description</b>	The MAC address portion of the node's System ID. This is combined with the system priority to construct the 8-octet system-id
<b>Context</b>	<a href="#">system lacp system-id string</a>
<b>Tree</b>	<a href="#">system-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**system-priority** *number*

<b>Description</b>	System priority used by the node on this LAG interface. Lower value is higher priority for determining which node is the controlling system.
<b>Context</b>	<a href="#">system lacp system-priority number</a>
<b>Tree</b>	<a href="#">system-priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**license id** *string*

<b>Description</b>	List of licenses configured on the system
<b>Context</b>	<a href="#">system license id string</a>
<b>Tree</b>	<a href="#">license</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	5

**id** *string*

<b>Description</b>	Unique identifier for this license
<b>Context</b>	<a href="#">system license id string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Enable or disable the use of this license
<b>Context</b>	<a href="#">system license id string admin-state keyword</a>

<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**data string**

<b>Description</b>	<p>Content of the license</p> <p>This content includes a preceding UUID, followed by a space and the license data.</p> <p>For example: 00000000-0000-0000-0000-000000000000 aACUAX...r YzNRPT0AAAAA</p>
<b>Context</b>	<a href="#">system license id</a> <i>string</i> <a href="#">data</a> <i>string</i>
<b>Tree</b>	<a href="#">data</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description string**

<b>Description</b>	A user provided description for the license
<b>Context</b>	<a href="#">system license id</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expiration-date string**

<b>Description</b>	Date and time the license will expire
<b>Context</b>	<a href="#">system license id string expiration-date string</a>
<b>Tree</b>	<a href="#">expiration-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**expired boolean**

<b>Description</b>	Indicates if the license has expired
<b>Context</b>	<a href="#">system license id string expired boolean</a>
<b>Tree</b>	<a href="#">expired</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**in-use boolean**

<b>Description</b>	Indicates if the license is actively in use
<b>Context</b>	<a href="#">system license id string in-use boolean</a>
<b>Tree</b>	<a href="#">in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**issued-date string**

<b>Description</b>	Date and time the license was issued
<b>Context</b>	<a href="#">system license id string issued-date string</a>



<b>Tree</b>	<a href="#">issued-date</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### preferred *boolean*

<b>Description</b>	Set a license as being preferred  Amongst all valid licenses, the preferred license will be chosen to become active. If no license is set as preferred or the preferred license is not valid, the valid license with the most distant expiry is chosen to become active.  Only a single license can be set as preferred.
<b>Context</b>	<a href="#">system license id</a> <i>string</i> <a href="#">preferred</a> <i>boolean</i>
<b>Tree</b>	<a href="#">preferred</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### valid *boolean*

<b>Description</b>	Indicates if the license is valid for use
<b>Context</b>	<a href="#">system license id</a> <i>string</i> <a href="#">valid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">valid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lldp

<b>Description</b>	Top-level container for LLDP configuration and state data
<b>Context</b>	<a href="#">system</a> <a href="#">lldp</a>

<b>Tree</b>	<a href="#">lldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	Enable or disable LLDP at the system level
<b>Context</b>	<a href="#">system lldp admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**chassis-id** *string*

<b>Description</b>	The Chassis ID is a mandatory TLV which identifies the chassis component of the endpoint identifier associated with the transmitting LLDP agent
<b>Context</b>	<a href="#">system lldp chassis-id</a> <i>string</i>
<b>Tree</b>	<a href="#">chassis-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**chassis-id-type** *keyword*

<b>Description</b>	<p>The source for the chassis identifier string</p> <p>It is an enumerator defined by the LldpChassisIdSubtype object from IEEE 802.1AB MIB.</p>
<b>Context</b>	<a href="#">system lldp chassis-id-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">chassis-id-type</a>
<b>Default</b>	MAC_ADDRESS
<b>Options</b>	<ul style="list-style-type: none"> <li>• CHASSIS_COMPONENT</li> </ul> <p>Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737</p> <ul style="list-style-type: none"> <li>• INTERFACE_ALIAS</li> </ul>

Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863

- PORT\_COMPONENT

Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port or backplane component

- MAC\_ADDRESS

Chassis identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order), of a port on the containing chassis as defined in IEEE Std 802-2001

- NETWORK\_ADDRESS

Chassis identifier based on a network address, associated with a particular chassis. The encoded address is composed of two fields. The first field is a single octet, representing the IANA AddressFamilyNumbers value for the specific address type, and the second field is the network address value

- INTERFACE\_NAME

Chassis identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863

- LOCAL

Chassis identifier based on a locally defined value

**Configurable**

False

**Platforms**

Supported on all platforms

### hello-timer *number*

**Description**

System level hello timer for the LLDP protocol

**Context**

[system lldp hello-timer \*number\*](#)

**Tree**

[hello-timer](#)

**Default**

30

**Units**

seconds

**Configurable**

True

**Platforms**

Supported on all platforms

### hold-multiplier *number*

**Description**

System level hold multiplier, used to define neighbor aging

This field defines how many hellos need to be missed before a neighbor is aged out.

This field also is used along with the 'hello-timer' field to define the TTL TLV in outgoing LLDPDUs.

<b>Context</b>	<a href="#">system lldp hold-multiplier</a> <i>number</i>
<b>Tree</b>	<a href="#">hold-multiplier</a>
<b>Default</b>	4
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **interface** [name](#) *reference*

<b>Description</b>	List of interfaces on which LLDP can be enabled
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **name** *reference*

<b>Description</b>	Reference to the LLDP Ethernet interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Enable or disable LLDP on the interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor id string**

<b>Description</b>	List of LLDP neighbors on this interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string</a>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**id string**

<b>Description</b>	System generated identifier for the remote neighbor
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**capability name identityref**

<b>Description</b>	List of LLDP system capabilities advertised by the neighbor
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string</a> <a href="#">capability name identityref</a>
<b>Tree</b>	<a href="#">capability</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**name identityref**

<b>Description</b>	Name of the system capability advertised by the neighbor Capabilities are represented in a bitmap that defines the primary functions of the system. The capabilities are defined in IEEE 802.1AB.
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string</a> <a href="#">capability name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• OTHER Other capability not specified; bit position 1</li> <li>• REPEATER Repeater capability; bit position 2</li> <li>• MAC_BRIDGE MAC bridge capability; bit position 3</li> </ul>

- **WLAN\_ACCESS\_POINT**  
WLAN access point capability; bit position 4
- **ROUTER**  
Router; bit position 5
- **TELEPHONE**  
Telephone capability; bit position 6
- **DOCSIS\_CABLE\_DEVICE**  
DOCSIS cable device; bit position 7
- **STATION\_ONLY**  
Station only capability, for devices that implement only an end station capability, and for which none of the other capabilities apply; bit position 8
- **C\_VLAN**  
C-VLAN component of a VLAN Bridge; bit position 9
- **S\_VLAN**  
S-VLAN component of a VLAN Bridge; bit position 10
- **TWO\_PORT\_MAC\_RELAY**  
Two-port MAC Relay (TPMR) capability; bit position 11

**Configurable**

False

**Platforms**

Supported on all platforms

**enabled** *boolean***Description**

Indicates whether the corresponding system capability is enabled on the neighbor

**Context**[system lldp interface name](#) *reference* [neighbor id](#) *string* [capability name](#) *identityref* [enabled](#) *boolean***Tree**[enabled](#)**Configurable**

False

**Platforms**

Supported on all platforms

**chassis-id** *string***Description**

The chassis ID of the remote neighbor

The Chassis ID is a mandatory TLV which identifies the chassis component of the endpoint identifier associated with the transmitting LLDP agent

**Context**[system lldp interface name](#) *reference* [neighbor id](#) *string* [chassis-id](#) *string***Tree**[chassis-id](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **chassis-id-type** *keyword*

<b>Description</b>	<p>The type of identifier used in the chassis-id field</p> <p>This field identifies the format and source of the chassis identifier string. It is an enumerator defined by the LldpChassisIdSubtype object from IEEE 802.1AB MIB.</p>
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string</a> <b>chassis-id-type</b> <i>keyword</i>
<b>Tree</b>	<a href="#">chassis-id-type</a>
<b>Default</b>	MAC_ADDRESS
<b>Options</b>	<ul style="list-style-type: none"> <li>• CHASSIS_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737</li> <li>• INTERFACE_ALIAS Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• PORT_COMPONENT Chassis identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port or backplane component</li> <li>• MAC_ADDRESS Chassis identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order), of a port on the containing chassis as defined in IEEE Std 802-2001</li> <li>• NETWORK_ADDRESS Chassis identifier based on a network address, associated with a particular chassis. The encoded address is composed of two fields. The first field is a single octet, representing the IANA AddressFamilyNumbers value for the specific address type, and the second field is the network address value</li> <li>• INTERFACE_NAME Chassis identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• LOCAL Chassis identifier based on a locally defined value</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**custom-tlv** *type number oui string oui-subtype string*

<b>Description</b>	List of custom LLDP TLVs from a neighbor
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">custom-tlv type number oui string oui-subtype string</a>
<b>Tree</b>	<a href="#">custom-tlv</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**type** *number*

<b>Description</b>	The integer value identifying the type of information contained in the value field.
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">custom-tlv type number oui string oui-subtype string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oui** *string*

<b>Description</b>	The organizationally unique identifier field from the custom TLV This field shall contain the organization's OUI as defined in Clause 9 of IEEE Std 802. The high-order octet is 0 and the low-order 3 octets are the SMI Network Management Private Enterprise Code of the Vendor in network byte order, as defined in the 'Assigned Numbers' RFC [RFC3232].
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">custom-tlv type number oui string oui-subtype string</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**oui-subtype** *string*

<b>Description</b>	The subtype value defined by the OUI for this custom TLV The organizationally defined subtype field shall contain a unique subtype value assigned by the defining organization.
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">custom-tlv type number oui string oui-subtype string</a>
<b>Configurable</b>	False



**Platforms** Supported on all platforms

### value *binary*

**Description** A variable-length octet-string containing the value for this TLV

**Context** [system lldp interface name](#) [reference neighbor id](#) [string custom-tlv type number oui](#) [string oui-subtype](#) [string value](#) [binary](#)

**Tree** [value](#)

**Configurable** False

**Platforms** Supported on all platforms

### first-message *string*

**Description** Date and time of the first message from neighbor

**Context** [system lldp interface name](#) [reference neighbor id](#) [string first-message](#) [string](#)

**Tree** [first-message](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### last-update *string*

**Description** Date and time of the last update from neighbor

**Context** [system lldp interface name](#) [reference neighbor id](#) [string last-update](#) [string](#)

**Tree** [last-update](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### management-address [address](#) *string*

**Description** List of management addresses received from the remote LLDP neighbor

**Context** [system lldp interface name](#) [reference neighbor id](#) [string management-address](#) [address](#) [string](#)

**Tree** [management-address](#)

**Configurable** False

**Platforms** Supported on all platforms

### **address string**

**Description** The management address received from the remote LLDP neighbor  
The Management Address is a mandatory TLV which identifies a network address associated with the LLDP agent, which can be used to reach the agent on the port identified in the Port ID TLV.

**Context** [system lldp interface name reference neighbor id string management-address address string](#)

**Configurable** False

**Platforms** Supported on all platforms

### **type keyword**

**Description** The type of management address referenced in the address field  
The enumerated value for the network address type identified in this TLV. This enumeration is defined in the 'Assigned Numbers' RFC [RFC3232] and the ianaAddressFamilyNumbers object.

**Context** [system lldp interface name reference neighbor id string management-address address string type keyword](#)

**Tree** [type](#)

**Options**

- IPv4  
Use IPv4 address for management address type
- IPv6  
Use IPv6 address for management address type

**Configurable** False

**Platforms** Supported on all platforms

### **port-description string**

**Description** The description of the port referenced in the port-id field  
The binary string containing the actual port identifier for the port which this LLDP PDU was transmitted. The source and format of this field is defined by PtopoPortId from RFC2922.

**Context** [system lldp interface name reference neighbor id string port-description string](#)

**Tree** [port-description](#)

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **port-id** (*string* | *binary*)

<b>Description</b>	The Port ID of the remote neighbor  The Port ID is a mandatory TLV which identifies the port component of the endpoint identifier associated with the transmitting LLDP agent. If the specified port is an IEEE 802.3 Repeater port, then this TLV is optional.
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string port-id</a> ( <i>string</i>   <i>binary</i> )
<b>Tree</b>	<a href="#">port-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **port-id-type** *keyword*

<b>Description</b>	The type of identifier used in the port-id field  This field identifies the format and source of the port identifier string. It is an enumerator defined by the PtopoPortIdType object from RFC2922.
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id string port-id-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">port-id-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>INTERFACE_ALIAS</b> Chassis identifier based on the value of ifAlias object defined in IETF RFC 2863</li> <li>• <b>PORT_COMPONENT</b> Port identifier based on the value of entPhysicalAlias object defined in IETF RFC 2737 for a port component</li> <li>• <b>MAC_ADDRESS</b> Port identifier based on the value of a unicast source address (encoded in network byte order and IEEE 802.3 canonical bit order) associated with a port</li> <li>• <b>NETWORK_ADDRESS</b> Port identifier based on a network address, associated with a particular port</li> <li>• <b>INTERFACE_NAME</b> Port identifier based on the name of the interface, e.g., the value of if Name object defined in IETF RFC 2863</li> <li>• <b>AGENT_CIRCUIT_ID</b></li> </ul>

Port identifier based on the circuit id in the DHCP relay agent information option as defined in IETF RFC 3046

- LOCAL

Port identifier based on a locally defined alphanumeric string

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **system-description** *string*

<b>Description</b>	<p>The system description of the remote neighbor</p> <p>The system description field shall contain an alpha-numeric string that is the textual description of the network entity. The system description should include the full name and version identification of the system's hardware type, software operating system, and networking software. If implementations support IETF RFC 3418, the sysDescr object should be used for this field.</p>
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">system-description</a> <i>string</i>
<b>Tree</b>	<a href="#">system-description</a>
<b>String Length</b>	0 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **system-name** *string*

<b>Description</b>	<p>The administratively assigned name of the remote neighbor</p> <p>The system name field shall contain an alpha-numeric string that indicates the system's administratively assigned name. The system name should be the system's fully qualified domain name. If implementations support IETF RFC 3418, the sysName object should be used for this field.</p>
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">neighbor id</a> <i>string</i> <a href="#">system-name</a> <i>string</i>
<b>Tree</b>	<a href="#">system-name</a>
<b>String Length</b>	0 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## **oper-state** keyword

<b>Description</b>	Details the operational state of LLDP on the interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li></ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	LLDP counters on each interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### frame-discard *number*

<b>Description</b>	The number of LLDP frames received and discarded
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">statistics frame-discard number</a>
<b>Tree</b>	<a href="#">frame-discard</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### frame-error-in *number*

<b>Description</b>	The number of LLDP frames received with errors
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">statistics frame-error-in number</a>
<b>Tree</b>	<a href="#">frame-error-in</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### frame-error-out *number*

<b>Description</b>	The number of frame transmit errors on the interface
<b>Context</b>	<a href="#">system lldp interface name</a> <i>reference</i> <a href="#">statistics frame-error-out number</a>
<b>Tree</b>	<a href="#">frame-error-out</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

### **frame-in *number***

**Description** The number of LLDP frames received

**Context** [system lldp interface name](#) *reference* [statistics frame-in number](#)

**Tree** [frame-in](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **frame-out *number***

**Description** The number of LLDP frames transmitted

**Context** [system lldp interface name](#) *reference* [statistics frame-out number](#)

**Tree** [frame-out](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **last-clear *string***

**Description** Indicates the last time the counters were cleared

**Context** [system lldp interface name](#) *reference* [statistics last-clear string](#)

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### **tlv-discard *number***

**Description** The number of TLV frames received and discarded

**Context** [system lldp interface name](#) *reference* [statistics tlv-discard number](#)

**Tree** [tlv-discard](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **tlv-unknown** *number*

**Description** The number of frames received with unknown TLV

**Context** [system lldp interface name](#) *reference* [statistics tlv-unknown](#) *number*

**Tree** [tlv-unknown](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms

### **management-address** [subinterface](#) *string*

**Description** List of subinterfaces to source management addresses from  
This list is sent in the management address TLV by LLDP.

**Context** [system lldp management-address subinterface](#) *string*

**Tree** [management-address](#)

**Configurable** True

**Platforms** Supported on all platforms

### **subinterface** *string*

**Description** Reference to the subinterface to source management addresses

**Context** [system lldp management-address subinterface](#) *string*

**String Length** 5 to 25

**Configurable** True

**Platforms** Supported on all platforms

### **type** *keyword*

**Description** Types of addresses sent in the management address TLV  
The enumerated value for the network address type identified in this TLV.  
This enumeration is defined in the 'Assigned Numbers' RFC [RFC3232] and the ianaAddressFamilyNumbers object.

**Context** [system lldp management-address subinterface](#) *string* [type](#) *keyword*

**Tree** [type](#)



<b>Options</b>	<ul style="list-style-type: none"> <li>• IPv4 Use IPv4 address for management address type</li> <li>• IPv6 Use IPv6 address for management address type</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Global LLDP counters
<b>Context</b>	<a href="#">system lldp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## entries-aged-out *number*

<b>Description</b>	The number of entries aged out due to timeout.
<b>Context</b>	<a href="#">system lldp statistics entries-aged-out number</a>
<b>Tree</b>	<a href="#">entries-aged-out</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## frame-discard *number*

<b>Description</b>	The number of LLDP frames received and discarded
<b>Context</b>	<a href="#">system lldp statistics frame-discard number</a>
<b>Tree</b>	<a href="#">frame-discard</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## frame-error-in *number*

<b>Description</b>	The number of LLDP frames received with errors
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<b>Context</b>	<a href="#">system lldp statistics frame-error-in number</a>
<b>Tree</b>	<a href="#">frame-error-in</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**frame-in number**

<b>Description</b>	The number of LLDP frames received
<b>Context</b>	<a href="#">system lldp statistics frame-in number</a>
<b>Tree</b>	<a href="#">frame-in</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**frame-out number**

<b>Description</b>	The number of LLDP frames transmitted
<b>Context</b>	<a href="#">system lldp statistics frame-out number</a>
<b>Tree</b>	<a href="#">frame-out</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**last-clear string**

<b>Description</b>	Indicates the last time the counters were cleared
<b>Context</b>	<a href="#">system lldp statistics last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tlv-accepted number**

<b>Description</b>	The number of valid TLVs received.
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<b>Context</b>	<a href="#">system lldp statistics tlv-accepted</a> <i>number</i>
<b>Tree</b>	<a href="#">tlv-accepted</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tlv-discard** *number*

<b>Description</b>	The number of TLV frames received and discarded
<b>Context</b>	<a href="#">system lldp statistics tlv-discard</a> <i>number</i>
<b>Tree</b>	<a href="#">tlv-discard</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**tlv-unknown** *number*

<b>Description</b>	The number of frames received with unknown TLV
<b>Context</b>	<a href="#">system lldp statistics tlv-unknown</a> <i>number</i>
<b>Tree</b>	<a href="#">tlv-unknown</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system-description** *string*

<b>Description</b>	Field detailing system description, including name and versions  The system description field shall contain an alpha-numeric string that is the textual description of the network entity. The system description should include the full name and version identification of the system's hardware type, software operating system, and networking software.
<b>Context</b>	<a href="#">system lldp system-description</a> <i>string</i>
<b>Tree</b>	<a href="#">system-description</a>
<b>String Length</b>	0 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**system-name** *string*

<b>Description</b>	The systems administratively assigned name  The system name field shall contain an alpha-numeric string that indicates the system's administratively assigned name. The system name should be the system's fully qualified domain name.
<b>Context</b>	<a href="#">system lldp system-name</a> <i>string</i>
<b>Tree</b>	<a href="#">system-name</a>
<b>String Length</b>	0 to 255
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**trace-options** *keyword*

<b>Description</b>	LLDP trace options
<b>Context</b>	<a href="#">system lldp trace-options</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• received</li> <li>• transmitted</li> <li>• common</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**load-balancing**

<b>Description</b>	Adjust system-wide ECMP load balancing options.
<b>Context</b>	<a href="#">system load-balancing</a>
<b>Tree</b>	<a href="#">load-balancing</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms except 7215 IXS-A1

**hash-options**

<b>Description</b>	Container for packet header fields and other inputs used in hashing calculations
<b>Context</b>	<a href="#">system load-balancing hash-options</a>

<b>Tree</b>	<a href="#">hash-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **destination-address** *boolean*

<b>Description</b>	Include the destination IP address in the hash calculation
<b>Context</b>	<a href="#">system load-balancing hash-options destination-address</a> <i>boolean</i>
<b>Tree</b>	<a href="#">destination-address</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **destination-port** *boolean*

<b>Description</b>	Include the destination TCP/UDP port number in the hash calculation if the packet is an unfragmented IP packet carrying a TCP/UDP payload
<b>Context</b>	<a href="#">system load-balancing hash-options destination-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">destination-port</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **hash-seed** (*number* | *keyword*)

<b>Description</b>	The hash seed to use for random selection of ECMP/LAG members To avoid polarization effects, directly-connected nodes should have unique hash-seeds. This can be achieved through explicit configuration of the hash-seed, or using the generate-from-mac option (which is the default), and checking that the auto-generated hash-seed is in fact unique (by reading the state value of this leaf).
<b>Context</b>	<a href="#">system load-balancing hash-options hash-seed</a> ( <i>number</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">hash-seed</a>
<b>Default</b>	generate-from-mac
<b>Options</b>	<ul style="list-style-type: none"> <li>generate-from-mac</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv6-flow-label** *boolean*

<b>Description</b>	Include the IPv6 flow label in the hash calculation if the packet is an IPv6 packet  It is expected that the IPv6 flow label value is written by the server or other host originating the flow and not changed by any intermediate switch or router.
<b>Context</b>	<a href="#">system load-balancing hash-options ipv6-flow-label</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ipv6-flow-label</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mpls-label-stack** *boolean*

<b>Description</b>	Include the received labels (terminated and non-terminated) in the hash calculation
<b>Context</b>	<a href="#">system load-balancing hash-options mpls-label-stack</a> <i>boolean</i>
<b>Tree</b>	<a href="#">mpls-label-stack</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**protocol** *boolean*

<b>Description</b>	Include the IP protocol number in the hash calculation. For an IPv6 packet this is protocol value in the next-header field of the last extension header.
<b>Context</b>	<a href="#">system load-balancing hash-options protocol</a> <i>boolean</i>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**source-address** *boolean*

<b>Description</b>	Include the source IP address in the hash calculation
<b>Context</b>	<a href="#">system load-balancing hash-options source-address</a> <i>boolean</i>

<b>Tree</b>	<a href="#">source-address</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### source-port *boolean*

<b>Description</b>	Include the source TCP/UDP port number in the hash calculation if the packet is an unfragmented IP packet carrying a TCP/UDP payload
<b>Context</b>	<a href="#">system load-balancing hash-options source-port</a> <i>boolean</i>
<b>Tree</b>	<a href="#">source-port</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### vlan *boolean*

<b>Description</b>	Include the received VLAN ID in the hash calculation
<b>Context</b>	<a href="#">system load-balancing hash-options vlan</a> <i>boolean</i>
<b>Tree</b>	<a href="#">vlan</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4

### lsr-profile *keyword*

<b>Description</b>	Adjust system-wide LSR ECMP load balancing options.
<b>Context</b>	<a href="#">system load-balancing lsr-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">lsr-profile</a>
<b>Default</b>	label-stack
<b>Options</b>	<ul style="list-style-type: none"> <li>label-stack LSR load balancing based on only the label stack. The datapath searches for BoS=1 or up until hash label search depth is reached</li> <li>label-eth-or-ip-l4-teid LSR load balancing based on the label stack and Eth or IP headers</li> </ul>

The datapath performs Eth speculation after BoS=1 or once max label stack depth is reached. Irrespective of the outcome of the Eth speculation further attempts IPv4/6 speculation based on first nibble, includes source and destination IP address, followed by UDP/TCP check for inclusion of source and destination ports and includes GTP/TEID when UDP or TCP port is 2123 or 2152. When Ethernet header speculation yields a positive outcome, source and destination MAC together with up to two VLANs are included in the hash

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## logging

<b>Description</b>	System logging provides the interface to syslog services to setup output entities on a selection of log sources.
<b>Context</b>	<a href="#">system logging</a>
<b>Tree</b>	<a href="#">logging</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## buffer [buffer-name string](#)

<b>Description</b>	Log files maintained in memory, non-persistent across system reboots These files are stored at directory /var/log/srlinux/buffer. Rotation into multiple files is available.
<b>Context</b>	<a href="#">system logging buffer buffer-name string</a>
<b>Tree</b>	<a href="#">buffer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## buffer-name [string](#)

<b>Description</b>	Base name of the file(s) to be stored in memory
<b>Context</b>	<a href="#">system logging buffer buffer-name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**facility** *facility-name* *keyword*

<b>Description</b>	List of facilities to source messages from
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">facility</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**facility-name** *keyword*

<b>Description</b>	Name of a Linux syslog facility
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"><li>• all</li><li>• audit</li><li>• auth</li><li>• authpriv</li><li>• console</li><li>• cron</li><li>• daemon</li><li>• ftp</li><li>• kern</li><li>• lpr</li><li>• mail</li><li>• news</li><li>• ntp</li><li>• syslog</li><li>• user</li><li>• uucp</li><li>• local0</li><li>• local1</li><li>• local2</li><li>• local3</li><li>• local4</li><li>• local5</li><li>• local6</li><li>• local7</li></ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## priority

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging buffer buffer-name string facility facility-name keyword priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-above *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging buffer buffer-name string facility facility-name keyword priority match-above keyword</a>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-exact *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging buffer buffer-name string facility facility-name keyword priority match-exact keyword</a>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> </ul>

- critical
- error
- warning
- notice
- informational
- debug

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **filter** *reference*

<b>Description</b>	A set of all-matching criteria that messages must fulfill in order to be captured
<b>Context</b>	<a href="#">system logging buffer buffer-name string filter reference</a>
<b>Tree</b>	<a href="#">filter</a>
<b>Reference</b>	<a href="#">system logging filter filter-name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **format** (*string* | *keyword*)

<b>Description</b>	Text format of syslog messages to a local output (buffer, file or console), in legacy rsyslog \$template style or one of the predefined templates  The default presents a date timestamp according to rfc3339. The predefined templates are the ones supported by rsyslogd.
<b>Context</b>	<a href="#">system logging buffer buffer-name string format (string   keyword)</a>
<b>Tree</b>	<a href="#">format</a>
<b>Default</b>	RSYSLOG_FileFormat
<b>Options</b>	<ul style="list-style-type: none"> <li>• RSYSLOG_FileFormat</li> <li>• RSYSLOG_TraditionalFileFormat</li> <li>• RSYSLOG_DebugFormat</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**persist** *number*

<b>Description</b>	Time in seconds to shadow the buffer to persistent storage Setting this field to 0 results in the buffer not being persisted. A value other than 0 will result in the log being persisted to disk based on the configured value. Logs with a non-zero persist value are persisted automatically on rollover, or at the configured value.
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string</i> <b>persist</b> <i>number</i>
<b>Tree</b>	<a href="#">persist</a>
<b>Range</b>	0   60 to 604800
<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rotate** *number*

<b>Description</b>	Number of files to keep in rotation when a maximum file size is reached
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string</i> <b>rotate</b> <i>number</i>
<b>Tree</b>	<a href="#">rotate</a>
<b>Default</b>	4
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rotations** *number*

<b>Description</b>	Number of file rotations occurred
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string</i> <b>rotations</b> <i>number</i>
<b>Tree</b>	<a href="#">rotations</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**size** *string*

<b>Description</b>	Number of bytes an individual output file cannot exceed
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The field allows the 'K, M, or G' suffixes as shorthand. When reaching that size, a rotation happens and subsequent data is stored in a new file with the same base name.

<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string size string</i>
<b>Tree</b>	<a href="#">size</a>
<b>Default</b>	10M
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **subsystem** [subsystem-name](#) *keyword*

<b>Description</b>	Entity or entities that may produce messages to be captured
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string subsystem subsystem-name keyword</i>
<b>Tree</b>	<a href="#">subsystem</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **subsystem-name** *keyword*

<b>Description</b>	Reference to an available subsystem to source messages from
<b>Context</b>	<a href="#">system logging buffer buffer-name</a> <i>string subsystem subsystem-name keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• aaa</li> <li>• accounting</li> <li>• acl</li> <li>• app</li> <li>• arpd</li> <li>• bfd</li> <li>• bgp</li> <li>• bridgetable</li> <li>• chassis</li> <li>• debug</li> <li>• dhcp</li> <li>• ethcfm</li> <li>• evpn</li> <li>• fib</li> </ul>

- gnmi
- gnoi
- gnsi
- gribi
- grpc
- igmp
- isis
- json
- lag
- ldp
- license
- linux
- lldp
- log
- mgmt
- mirror
- mld
- mpls
- netconf
- netinst
- oam\_pm
- ospf
- p4rt
- pcc
- pim
- platform
- policy
- pw
- qos
- sath
- sdk
- sflow
- staticroute
- stp
- sync
- twamp

	<ul style="list-style-type: none"> <li>• vxlan</li> <li>• xdp</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## priority

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging buffer buffer-name string subsystem subsystem-name keyword priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-above *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging buffer buffer-name string subsystem subsystem-name keyword priority match-above keyword</a>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-exact *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging buffer buffer-name string subsystem subsystem-name keyword priority match-exact keyword</a>
<b>Tree</b>	<a href="#">match-exact</a>

<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
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<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## console

<b>Description</b>	Hardware serial device normally used for bring-up and diagnostics
<b>Context</b>	<a href="#">system logging console</a>
<b>Tree</b>	<a href="#">console</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## facility [facility-name](#) *keyword*

<b>Description</b>	List of facilities to source messages from
<b>Context</b>	<a href="#">system logging console facility facility-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">facility</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## facility-name *keyword*

<b>Description</b>	Name of a Linux syslog facility
<b>Context</b>	<a href="#">system logging console facility facility-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all</li> <li>• audit</li> <li>• auth</li> <li>• authpriv</li> <li>• console</li> </ul>



- cron
- daemon
- ftp
- kern
- lpr
- mail
- news
- ntp
- syslog
- user
- uucp
- local0
- local1
- local2
- local3
- local4
- local5
- local6
- local7

**Configurable**

True

**Platforms**

Supported on all platforms

**priority****Description**

Narrows the capture to a given severity, a range or a specific set of severities

**Context**[system logging console facility facility-name keyword priority](#)**Tree**[priority](#)**Configurable**

True

**Platforms**

Supported on all platforms

**match-above *keyword*****Description**

At a given severity and above

**Context**[system logging console facility facility-name keyword priority match-above keyword](#)**Tree**[match-above](#)

<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
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<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging console facility facility-name</a> <i>keyword</i> <a href="#">priority match-exact keyword</a>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **filter** *reference*

<b>Description</b>	A set of all-matching criteria that messages must fulfill in order to be captured
<b>Context</b>	<a href="#">system logging console filter</a> <i>reference</i>
<b>Tree</b>	<a href="#">filter</a>
<b>Reference</b>	<a href="#">system logging filter filter-name</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **format** (*string* | *keyword*)

**Description** Text format of syslog messages to a local output (buffer, file or console), in legacy rsyslog \$template style or one of the predefined templates

The default presents a date timestamp according to rfc3339. The predefined templates are the ones supported by rsyslogd.

**Context** [system logging console format](#) (*string* | *keyword*)

**Tree** [format](#)

**Default** RSYSLOG\_FileFormat

**Options**

- RSYSLOG\_FileFormat
- RSYSLOG\_TraditionalFileFormat
- RSYSLOG\_DebugFormat

**Configurable** True

**Platforms** Supported on all platforms

### **subsystem** [subsystem-name](#) *keyword*

**Description** Entity or entities that may produce messages to be captured

**Context** [system logging console subsystem subsystem-name](#) *keyword*

**Tree** [subsystem](#)

**Configurable** True

**Platforms** Supported on all platforms

### **subsystem-name** *keyword*

**Description** Reference to an available subsystem to source messages from

**Context** [system logging console subsystem subsystem-name](#) *keyword*

**Options**

- aaa
- accounting
- acl
- app
- arpd
- bfd
- bgp

- bridgetable
- chassis
- debug
- dhcp
- ethcfm
- evpn
- fib
- gnmi
- gnoi
- gnsi
- gribi
- grpc
- igmp
- isis
- json
- lag
- ldp
- license
- linux
- lldp
- log
- mgmt
- mirror
- mld
- mpls
- netconf
- netinst
- oam\_pm
- ospf
- p4rt
- pcc
- pim
- platform
- policy
- pw
- qos

- sath
- sdk
- sflow
- staticroute
- stp
- sync
- twamp
- vxlan
- xdp

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## priority

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging console subsystem subsystem-name keyword priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-above *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging console subsystem subsystem-name keyword priority match-above keyword</a>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging console subsystem subsystem-name</a> <i>keyword</i> <a href="#">priority match-exact</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**file** [file-name](#) *string*

<b>Description</b>	Log files maintained on disk, persistent across system reboots When a maximum file size is reached, the file is renamed and a maximum rotate number of them are kept.
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i>
<b>Tree</b>	<a href="#">file</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**file-name** *string*

<b>Description</b>	Base name of the file(s) to be stored on disk
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**directory** *string*

<b>Description</b>	Fully qualified path of a directory where the log file(s) shall be maintained
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">directory</a> <i>string</i>
<b>Tree</b>	<a href="#">directory</a>
<b>Default</b>	/var/log/srlinux/file
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**facility** [facility-name](#) *keyword*

<b>Description</b>	List of facilities to source messages from
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">facility</a> <a href="#">facility-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">facility</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**facility-name** *keyword*

<b>Description</b>	Name of a Linux syslog facility
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">facility</a> <a href="#">facility-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"><li>• all</li><li>• audit</li><li>• auth</li><li>• authpriv</li><li>• console</li><li>• cron</li><li>• daemon</li><li>• ftp</li><li>• kern</li><li>• lpr</li><li>• mail</li><li>• news</li><li>• ntp</li><li>• syslog</li><li>• user</li></ul>

- uucp
- local0
- local1
- local2
- local3
- local4
- local5
- local6
- local7

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## priority

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging file file-name string facility facility-name keyword priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## match-above *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging file file-name string facility facility-name keyword priority match-above keyword</a>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i> <a href="#">priority match-exact</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**filter** *reference*

<b>Description</b>	A set of all-matching criteria that messages must fulfill in order to be captured
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">filter reference</a>
<b>Tree</b>	<a href="#">filter</a>
<b>Reference</b>	<a href="#">system logging filter filter-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**format** (*string* | *keyword*)

<b>Description</b>	Text format of syslog messages to a local output (buffer, file or console), in legacy rsyslog \$template style or one of the predefined templates The default presents a date timestamp according to rfc3339. The predefined templates are the ones supported by rsyslogd.
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">format (string   keyword)</a>
<b>Tree</b>	<a href="#">format</a>
<b>Default</b>	RSYSLOG_FileFormat

<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>RSYSLOG_FileFormat</code></li> <li>• <code>RSYSLOG_TraditionalFileFormat</code></li> <li>• <code>RSYSLOG_DebugFormat</code></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rotate** *number*

<b>Description</b>	Number of files to keep in rotation when a maximum file size is reached
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string rotate number</i>
<b>Tree</b>	<a href="#">rotate</a>
<b>Default</b>	4
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rotations** *number*

<b>Description</b>	Number of file rotations occurred
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string rotations number</i>
<b>Tree</b>	<a href="#">rotations</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**size** *string*

<b>Description</b>	<p>Number of bytes an individual output file cannot exceed</p> <p>The field allows the 'K, M, or G' suffixes as shorthand. When reaching that size, a rotation happens and subsequent data is stored in a new file with the same base name.</p>
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string size string</i>
<b>Tree</b>	<a href="#">size</a>
<b>Default</b>	10M
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**subsystem** `subsystem-name` *keyword*

<b>Description</b>	Entity or entities that may produce messages to be captured
<b>Context</b>	<code>system logging file file-name</code> <i>string</i> <code>subsystem subsystem-name</code> <i>keyword</i>
<b>Tree</b>	<code>subsystem</code>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**subsystem-name** *keyword*

<b>Description</b>	Reference to an available subsystem to source messages from
<b>Context</b>	<code>system logging file file-name</code> <i>string</i> <code>subsystem subsystem-name</code> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>aaa</code></li> <li>• <code>accounting</code></li> <li>• <code>acl</code></li> <li>• <code>app</code></li> <li>• <code>arpnd</code></li> <li>• <code>bfd</code></li> <li>• <code>bgp</code></li> <li>• <code>bridgetable</code></li> <li>• <code>chassis</code></li> <li>• <code>debug</code></li> <li>• <code>dhcp</code></li> <li>• <code>ethcfm</code></li> <li>• <code>evpn</code></li> <li>• <code>fib</code></li> <li>• <code>gnmi</code></li> <li>• <code>gnoi</code></li> <li>• <code>gnsi</code></li> <li>• <code>gribi</code></li> <li>• <code>grpc</code></li> <li>• <code>igmp</code></li> <li>• <code>isis</code></li> <li>• <code>json</code></li> <li>• <code>lag</code></li> <li>• <code>ldp</code></li> </ul>

- license
- linux
- lldp
- log
- mgmt
- mirror
- mld
- mpls
- netconf
- netinst
- oam\_pm
- ospf
- p4rt
- pcc
- pim
- platform
- policy
- pw
- qos
- sath
- sdk
- sflow
- staticroute
- stp
- sync
- twamp
- vxlan
- xdp

**Configurable**

True

**Platforms**

Supported on all platforms

## priority

**Description**

Narrows the capture to a given severity, a range or a specific set of severities

**Context**

[system logging file file-name string subsystem subsystem-name keyword priority](#)

<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-above** *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">subsystem subsystem-name</a> <i>keyword</i> <a href="#">priority match-above</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging file file-name</a> <i>string</i> <a href="#">subsystem subsystem-name</a> <i>keyword</i> <a href="#">priority match-exact</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **filter** *filter-name string*

**Description** Describes a set of criteria that captured messages are required to fulfill

**Context** [system logging filter filter-name string](#)

**Tree** [filter](#)

**Configurable** True

**Platforms** Supported on all platforms

### **filter-name** *string*

**Description** Name of the filter

**Context** [system logging filter filter-name string](#)

**Configurable** True

**Platforms** Supported on all platforms

### **contains** *string*

**Description** Text to find in the MSG property of messages to capture from the stream  
This is slower than prefix.

**Context** [system logging filter filter-name string contains string](#)

**Tree** [contains](#)

**Configurable** True

**Platforms** Supported on all platforms

### **facility** *facility-name keyword*

**Description** List of facilities to source messages from

**Context** [system logging filter filter-name string facility facility-name keyword](#)

**Tree** [facility](#)

**Configurable** True

**Platforms** Supported on all platforms

**facility-name** *keyword*

<b>Description</b>	Name of a Linux syslog facility
<b>Context</b>	<a href="#">system logging filter filter-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all</li> <li>• audit</li> <li>• auth</li> <li>• authpriv</li> <li>• console</li> <li>• cron</li> <li>• daemon</li> <li>• ftp</li> <li>• kern</li> <li>• lpr</li> <li>• mail</li> <li>• news</li> <li>• ntp</li> <li>• syslog</li> <li>• user</li> <li>• uucp</li> <li>• local0</li> <li>• local1</li> <li>• local2</li> <li>• local3</li> <li>• local4</li> <li>• local5</li> <li>• local6</li> <li>• local7</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**priority**

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging filter filter-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i> <a href="#">priority</a>
<b>Tree</b>	<a href="#">priority</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **match-above** *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging filter filter-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i> <a href="#">priority match-above</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging filter filter-name</a> <i>string</i> <a href="#">facility facility-name</a> <i>keyword</i> <a href="#">priority match-exact</a> <i>keyword</i>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**prefix string**

<b>Description</b>	Text to be present at the beginning of the MSG property of a message This is a fast lookup.
<b>Context</b>	<a href="#">system logging filter filter-name string prefix string</a>
<b>Tree</b>	<a href="#">prefix</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**regex string**

<b>Description</b>	Extended regular expression to search in the MSG property of messages
<b>Context</b>	<a href="#">system logging filter filter-name string regex string</a>
<b>Tree</b>	<a href="#">regex</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**tag string**

<b>Description</b>	Text to be searched in the SYSLOGTAG property of messages Usually a program name or part of it.
<b>Context</b>	<a href="#">system logging filter filter-name string tag string</a>
<b>Tree</b>	<a href="#">tag</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance reference**

<b>Description</b>	Reference to a configured network-instance to run rsyslogd in This network-instance will be used as a source for requests to remote syslog servers.
<b>Context</b>	<a href="#">system logging network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**remote-server host** (*ipv4-address | ipv6-address | domain-name*)

<b>Description</b>	List of output remote syslog servers
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address   ipv6-address   domain-name</i> )
<b>Tree</b>	<a href="#">remote-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**host** (*ipv4-address | ipv6-address | domain-name*)

<b>Description</b>	Domain or IP address of a remote syslog server destination
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address   ipv6-address   domain-name</i> )
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**facility facility-name keyword**

<b>Description</b>	List of facilities to source messages from
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address   ipv6-address   domain-name</i> ) <a href="#">facility facility-name keyword</a>
<b>Tree</b>	<a href="#">facility</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**facility-name keyword**

<b>Description</b>	Name of a Linux syslog facility
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address   ipv6-address   domain-name</i> ) <a href="#">facility facility-name keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all</li> <li>• audit</li> <li>• auth</li> <li>• authpriv</li> <li>• console</li> </ul>

- cron
- daemon
- ftp
- kern
- lpr
- mail
- news
- ntp
- syslog
- user
- uucp
- local0
- local1
- local2
- local3
- local4
- local5
- local6
- local7

**Configurable**

True

**Platforms**

Supported on all platforms

**priority****Description**

Narrows the capture to a given severity, a range or a specific set of severities

**Context**[system logging remote-server host](#) ([ipv4-address](#) | [ipv6-address](#) | [domain-name](#)) [facility](#) [facility-name](#) [keyword](#) [priority](#)**Tree**[priority](#)**Configurable**

True

**Platforms**

Supported on all platforms

**match-above** *keyword***Description**

At a given severity and above

**Context**[system logging remote-server host](#) ([ipv4-address](#) | [ipv6-address](#) | [domain-name](#)) [facility](#) [facility-name](#) [keyword](#) [priority](#) [match-above](#) [keyword](#)**Tree**[match-above](#)

<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
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<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a>   <a href="#">domain-name</a> ) <a href="#">facility facility-name</a> <a href="#">keyword</a> <a href="#">priority</a> <a href="#">match-exact</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **filter** *reference*

<b>Description</b>	A set of all-matching criteria that messages must fulfill in order to be captured
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a>   <a href="#">domain-name</a> ) <a href="#">filter reference</a>
<b>Tree</b>	<a href="#">filter</a>
<b>Reference</b>	<a href="#">system logging filter filter-name</a> <i>string</i>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **format** (*string* | *keyword*)

<b>Description</b>	Text format of syslog messages to a remote server, in legacy rsyslog \$template style or one of the predefined templates  The default presents a date timestamp according to rfc3339. The predefined templates are the ones supported by rsyslogd.
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <a href="#">format</a> ( <i>string</i>   <i>keyword</i> )
<b>Tree</b>	<a href="#">format</a>
<b>Default</b>	RSYSLOG_SyslogProtocol23Format
<b>Options</b>	<ul style="list-style-type: none"> <li>• RSYSLOG_ForwardFormat</li> <li>• RSYSLOG_SyslogProtocol23Format</li> <li>• RSYSLOG_TraditionalForwardFormat</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **remote-port** *number*

<b>Description</b>	Transport port for syslog to use for messages sent to a remote server
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <a href="#">remote-port</a> <i>number</i>
<b>Tree</b>	<a href="#">remote-port</a>
<b>Default</b>	514
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Source address for syslog to use for messages sent to a remote server  If no source address is provided, then packets will be sent to the remote server using the source address indicated by the routing table.
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <a href="#">source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **subsystem** [subsystem-name](#) *keyword*

<b>Description</b>	Entity or entities that may produce messages to be captured
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <a href="#">subsystem subsystem-name</a> <i>keyword</i>
<b>Tree</b>	<a href="#">subsystem</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **subsystem-name** *keyword*

<b>Description</b>	Reference to an available subsystem to source messages from
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <a href="#">subsystem subsystem-name</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• aaa</li> <li>• accounting</li> <li>• acl</li> <li>• app</li> <li>• arpd</li> <li>• bfd</li> <li>• bgp</li> <li>• bridgetable</li> <li>• chassis</li> <li>• debug</li> <li>• dhcp</li> <li>• ethcfm</li> <li>• evpn</li> <li>• fib</li> <li>• gnmi</li> <li>• gnoi</li> <li>• gnsi</li> <li>• gribi</li> <li>• grpc</li> <li>• igmp</li> </ul>

- isis
- json
- lag
- ldp
- license
- linux
- lldp
- log
- mgmt
- mirror
- mld
- mpls
- netconf
- netinst
- oam\_pm
- ospf
- p4rt
- pcc
- pim
- platform
- policy
- pw
- qos
- sath
- sdk
- sflow
- staticroute
- stp
- sync
- twamp
- vxlan
- xdp

**Configurable  
Platforms**

True  
Supported on all platforms

**priority**

<b>Description</b>	Narrows the capture to a given severity, a range or a specific set of severities
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a>   <a href="#">domain-name</a> ) <a href="#">subsystem subsystem-name</a> <a href="#">keyword</a> <a href="#">priority</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-above** *keyword*

<b>Description</b>	At a given severity and above
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a>   <a href="#">domain-name</a> ) <a href="#">subsystem subsystem-name</a> <a href="#">keyword</a> <a href="#">priority</a> <a href="#">match-above</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">match-above</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**match-exact** *keyword*

<b>Description</b>	Individually specified severities
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a>   <a href="#">domain-name</a> ) <a href="#">subsystem subsystem-name</a> <a href="#">keyword</a> <a href="#">priority</a> <a href="#">match-exact</a> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">match-exact</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> </ul>



	<ul style="list-style-type: none"> <li>• warning</li> <li>• notice</li> <li>• informational</li> <li>• debug</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **transport** *keyword*

<b>Description</b>	Transport protocol for syslog to use for messages sent to a remote server
<b>Context</b>	<a href="#">system logging remote-server host</a> ( <i>ipv4-address</i>   <i>ipv6-address</i>   <i>domain-name</i> ) <b>transport</b> <i>keyword</i>
<b>Tree</b>	<a href="#">transport</a>
<b>Default</b>	udp
<b>Options</b>	<ul style="list-style-type: none"> <li>• udp</li> <li>• tcp</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **subsystem-facility** *keyword*

<b>Description</b>	Linux facility that internal application subsystems will use
<b>Context</b>	<a href="#">system logging subsystem-facility</a> <i>keyword</i>
<b>Tree</b>	<a href="#">subsystem-facility</a>
<b>Default</b>	local6
<b>Options</b>	<ul style="list-style-type: none"> <li>• all</li> <li>• audit</li> <li>• auth</li> <li>• authpriv</li> <li>• console</li> <li>• cron</li> <li>• daemon</li> <li>• ftp</li> <li>• kern</li> <li>• lpr</li> <li>• mail</li> </ul>

- news
- ntp
- syslog
- user
- uucp
- local0
- local1
- local2
- local3
- local4
- local5
- local6
- local7
- auth
- authpriv
- cron
- daemon
- ftp
- kern
- lpr
- mail
- news
- ntp
- syslog
- user
- uucp
- local0
- local1
- local2
- local3
- local4
- local5
- local6
- local7

**Configurable  
Platforms**

True  
Supported on all platforms

**use-fqdn** *boolean*

<b>Description</b>	Use the FQDN instead of only the hostname for logging messages
<b>Context</b>	<a href="#">system logging use-fqdn boolean</a>
<b>Tree</b>	<a href="#">use-fqdn</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance**

<b>Description</b>	Top-level container for Maintenance Mode configuration
<b>Context</b>	<a href="#">system maintenance</a>
<b>Tree</b>	<a href="#">maintenance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**group name** *string*

<b>Description</b>	List of user-configured maintenance groups
<b>Context</b>	<a href="#">system maintenance group name string</a>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the maintenance group.
<b>Context</b>	<a href="#">system maintenance group name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance-mode**

<b>Description</b>	Container with options for activating and deactivating maintenance mode for this group
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">maintenance-mode</a>
<b>Tree</b>	<a href="#">maintenance-mode</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state** *keyword*

<b>Description</b>	<p>Enable or disable maintenance mode for this group</p> <p>The enable setting is blocked if there is another maintenance group with at least one BGP session in its scope that overlaps with this maintenance group and that other maintenance group is currently in maintenance mode. While a maintenance group is in maintenance mode it is not possible to modify the BGP configuration of its members.</p>
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">maintenance-mode</a> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**maintenance-profile** *reference*

<b>Description</b>	Leaf reference to /system/maintenance/profile/name
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">maintenance-profile</a> <i>reference</i>
<b>Tree</b>	<a href="#">maintenance-profile</a>
<b>Reference</b>	<a href="#">system maintenance profile name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**members**

<b>Description</b>	Container for specifying the members of the maintenance group - i.e. the components that will eventually be taken out of service for repair or replacement.
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members</a>
<b>Tree</b>	<a href="#">members</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bgp**

<b>Description</b>	Container for specifying the BGP members of the maintenance group
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members</a> <a href="#">bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance** [name](#) *reference*

<b>Description</b>	List of network instances with one or more peers to be placed in maintenance mode
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members</a> <a href="#">bgp</a> <a href="#">network-instance name</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *reference*

<b>Description</b>	A unique name identifying the network instance
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members</a> <a href="#">bgp</a> <a href="#">network-instance name</a> <i>reference</i>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor** *reference*

<b>Description</b>	List of BGP neighbors that belong to the network instance and that should be part of the maintenance group  It is not necessary to list neighbors that are members of peer-groups that are already listed.  If this list is empty and so is the group list, then the system interprets the meaning as ALL static and dynamic sessions belonging to the specified network-instance.
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members bgp network-instance name</a> <i>reference</i> <a href="#">neighbor</a> <i>reference</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-group** *reference*

<b>Description</b>	List of BGP peer groups that belong to the network instance and that should be part of the maintenance group  If this list is empty and so is the neighbor list, then the system interprets the meaning as ALL static and dynamic sessions belonging to the specified network-instance.
<b>Context</b>	<a href="#">system maintenance group name</a> <i>string</i> <a href="#">members bgp network-instance name</a> <i>reference</i> <a href="#">peer-group</a> <i>reference</i>
<b>Tree</b>	<a href="#">peer-group</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**profile** *name string*

<b>Description</b>	Enter the profile list instance
<b>Context</b>	<a href="#">system maintenance profile name</a> <i>string</i>
<b>Tree</b>	<a href="#">profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the maintenance profile
<b>Context</b>	<a href="#">system maintenance profile name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**bgp**

<b>Description</b>	Container for BGP policies used to achieve traffic draining
<b>Context</b>	<a href="#">system maintenance profile name</a> <i>string</i> <a href="#">bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-policy** *reference*

<b>Description</b>	A reference to the pre-configured routing policy to apply as an additional/final export policy on BGP sessions in the maintenance group
<b>Context</b>	<a href="#">system maintenance profile name</a> <i>string</i> <a href="#">bgp export-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">export-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**import-policy** *reference*

<b>Description</b>	A reference to the pre-configured routing policy to apply as an additional/final import policy on BGP sessions in the maintenance group
<b>Context</b>	<a href="#">system maintenance profile name</a> <i>string</i> <a href="#">bgp import-policy</a> <i>reference</i>
<b>Tree</b>	<a href="#">import-policy</a>
<b>Reference</b>	<a href="#">routing-policy policy name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**management**

<b>Description</b>	Enclosing container for options relating to management server
<b>Context</b>	<a href="#">system management</a>
<b>Tree</b>	<a href="#">management</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**openconfig**

<b>Description</b>	Top-level container for options relating to OpenConfig
<b>Context</b>	<a href="#">system management openconfig</a>
<b>Tree</b>	<a href="#">openconfig</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**admin-state** *keyword*

<b>Description</b>	Enable or disable the OpenConfig management server This will disable OpenConfig throughout the system, and bring any gRPC servers that use it operationally down.
<b>Context</b>	<a href="#">system management openconfig admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**oper-state** *keyword*

<b>Description</b>	Indicates the operational state of the OpenConfig management server
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<b>Context</b>	<a href="#">system management openconfig oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## mirroring

<b>Description</b>	Top level container for configuration and operational state for mirroring
<b>Context</b>	<a href="#">system mirroring</a>
<b>Tree</b>	<a href="#">mirroring</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mirroring-instance *name string*

<b>Description</b>	Mirroring instances configured on the local system
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string</a>
<b>Tree</b>	<a href="#">mirroring-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	8

## name *string*

<b>Description</b>	A unique name identifying the mirroring instance
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

<b>Description</b>	This leaf contains the configured, desired state of the mirroring instance.
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string admin-state keyword</a>

<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	A user-entered description of this mirroring instance.
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mirror-destination

<b>Description</b>	Configure mirror destination
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination</a>
<b>Tree</b>	<a href="#">mirror-destination</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local *string*

<b>Description</b>	subinterface of type local-mirror-dest used as local mirror destination
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination</a> <a href="#">local</a> <i>string</i>
<b>Tree</b>	<a href="#">local</a>
<b>String Length</b>	5 to 25

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote**

<b>Description</b>	Enable the remote context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination</a> <a href="#">remote</a>
<b>Tree</b>	<a href="#">remote</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**encap** *keyword*

<b>Description</b>	Enter the encap context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination</a> <a href="#">remote</a> <a href="#">encap</a> <i>keyword</i>
<b>Tree</b>	<a href="#">encap</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• l2ogre</li> <li>• l3ogre</li> <li>• mpls-gre</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** *reference*

<b>Description</b>	network instance to initiate remote mirror tunnel
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination</a> <a href="#">remote</a> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tunnel-end-points

**Description** Enter the tunnel-end-points context

**Context** [system mirroring mirroring-instance name](#) *string* [mirror-destination remote tunnel-end-points](#)

**Tree** [tunnel-end-points](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## admin-state *keyword*

**Description** This leaf contains the configured, desired state of the remote mirror tunnel

**Context** [system mirroring mirroring-instance name](#) *string* [mirror-destination remote tunnel-end-points admin-state](#) *keyword*

**Tree** [admin-state](#)

**Default** enable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## destination-address (*ipv4-address* | *ipv6-address*)

**Description** remote mirror tunnel destination endpoint ip-address

**Context** [system mirroring mirroring-instance name](#) *string* [mirror-destination remote tunnel-end-points destination-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [destination-address](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of the remote mirror tunnel
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination remote tunnel-end-points oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting</li> </ul>

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **service-label** *number*

<b>Description</b>	Service label for encapsulation type mpls-gre tunnel
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination remote tunnel-end-points service-label</a> <i>number</i>
<b>Tree</b>	<a href="#">service-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	remote mirror tunnel source endpoint ip-address
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination remote tunnel-end-points source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**egress-mirrored-octets** *number*

<b>Description</b>	The number of egress mirrored octets
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination statistics egress-mirrored-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">egress-mirrored-octets</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**egress-mirrored-packets** *number*

<b>Description</b>	The number of egress mirrored packets
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination statistics egress-mirrored-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">egress-mirrored-packets</a>
<b>Default</b>	0
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5

**ingress-mirrored-octets** *number*

<b>Description</b>	The number of ingress mirrored octets
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination statistics ingress-mirrored-octets</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-mirrored-octets</a>
<b>Default</b>	0
<b>Units</b>	bytes
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**ingress-mirrored-packets** *number*

<b>Description</b>	The number of ingress mirrored packets
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-destination statistics ingress-mirrored-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">ingress-mirrored-packets</a>
<b>Default</b>	0
<b>Units</b>	packets
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**mirror-source**

<b>Description</b>	Configure mirror source(s)
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source</a>
<b>Tree</b>	<a href="#">mirror-source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**acl**

<b>Description</b>	Enter the acl context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source</a> <a href="#">acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**acl-filter** *name reference type reference*

<b>Description</b>	List IPv4, IPv6 ACL filters
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source</a> <a href="#">acl</a> <a href="#">acl-filter name</a> <i>reference type reference</i>
<b>Tree</b>	<a href="#">acl-filter</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**name** *reference*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source acl acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**type** *reference*

<b>Description</b>	Reference to the ACL filter policy type
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source acl acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**entry** [sequence-id](#) *reference*

<b>Description</b>	Add a list entry for entry
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source acl acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>reference</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**sequence-id** *reference*

<b>Description</b>	Enter the sequence-id context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source acl acl-filter name</a> <i>reference</i> <a href="#">type</a> <i>reference</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>reference</i>
<b>Reference</b>	<a href="#">acl acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**interface** [name](#) *string*

<b>Description</b>	List of interfaces used as mirror source
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source interface name</a> <i>string</i>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	The direction of traffic to be mirrored
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source interface name</a> <i>string</i> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">direction</a>

<b>Default</b>	egress-only
<b>Options</b>	<ul style="list-style-type: none"> <li>• ingress-only</li> <li>• egress-only</li> <li>• ingress-egress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *name string*

<b>Description</b>	List of subinterfaces used as mirror source
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string mirror-source subinterface name string</a>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string mirror-source subinterface name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### direction *keyword*

<b>Description</b>	The direction of traffic to be mirrored
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string mirror-source subinterface name string direction keyword</a>
<b>Tree</b>	<a href="#">direction</a>
<b>Default</b>	egress-only

<b>Options</b>	<ul style="list-style-type: none"> <li>• ingress-only</li> <li>• egress-only</li> <li>• ingress-egress</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-down-reason** *keyword*

<b>Description</b>	The reason for the mirror source being operational down. When the reason is not applicable, it is due to the mirror instance being shutdown or the mirror source is operational up.
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source subinterface name</a> <i>string</i> <b>oper-down-reason</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mirror-source-ingress-table-full</li> <li>• mirror-source-egress-table-full</li> <li>• not-applicable</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of the mirror-source.
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <a href="#">mirror-source subinterface name</a> <i>string</i> <b>oper-state</b> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> </ul>

- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading  
Component is currently being upgraded
- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason** *keyword***Description**

The reason for the mirroring instance being operational down

**Context**[system mirroring mirroring-instance name](#) *string oper-down-reason keyword***Tree**[oper-down-reason](#)**Options**

- mirror-inst-admin-down
- no-mirror-source
- local-mirror-subif-down
- remote-mirror-dst-unreachable

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state keyword**

<b>Description</b>	This leaf contains the operational state of the mirroring instance.
<b>Context</b>	<a href="#">system mirroring mirroring-instance name</a> <i>string</i> <b>oper-state keyword</b>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> </ul>

- **waiting**  
Component or process is currently waiting  
This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls****Description**

Container for system wide MPLS label management

**Context**[system mpls](#)**Tree**[mpls](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-ranges****Description**

Container for managing MPLS label blocks

**Context**[system mpls label-ranges](#)**Tree**[label-ranges](#)**Configurable**

True

**Platforms**

7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dynamic [name string](#)****Description**

List of dynamic label blocks

When a client application binds its operation to a dynamic label block that client application is expected to just ask for the next available label within the dynamic label block.

At this time a dynamic label block cannot be shared by multiple different clients/protocols. Each protocol needing dynamic labels must have its own label block.

**Context**[system mpls label-ranges dynamic name string](#)**Tree**[dynamic](#)



<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	The name of the dynamic label block
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**allocated-labels** *number*

<b>Description</b>	The number of labels that are currently used in this block
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string allocated-labels number</a>
<b>Tree</b>	<a href="#">allocated-labels</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-label** *number*

<b>Description</b>	The ending label value of the label block. When the status is not-ready or updating, the state value may be different from the configured value
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string end-label number</a>
<b>Tree</b>	<a href="#">end-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**free-labels** *number*

<b>Description</b>	The number of labels that are currently available and free in this block.
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When the status is not-ready or updating, the state value may be different from the configured value

<b>Context</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i> <a href="#">free-labels</a> <i>number</i>
<b>Tree</b>	<a href="#">free-labels</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **start-label** *number*

<b>Description</b>	The starting label value of the label block. When the status is not-ready or updating, the state value may be different from the configured value
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i> <a href="#">start-label</a> <i>number</i>
<b>Tree</b>	<a href="#">start-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **status** *keyword*

<b>Description</b>	The status of the MPLS label block
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>ready</b> The label block is ready to use.</li> <li>• <b>not-ready</b> The label block is not ready to use.</li> <li>• <b>delete-pending</b> The label block is in the process of being deleted.</li> <li>• <b>updating</b> The label block is available to use but the new limits do not apply yet.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user index number**

<b>Description</b>	The list of protocols that are using this label block. If the block is not shared there will only be 1 user
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string user index number</a>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**index number**

<b>Description</b>	Index number used to enumerate the clients
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string user index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**owner identityref**

<b>Description</b>	The protocol or service associated with the client
<b>Context</b>	<a href="#">system mpls label-ranges dynamic name string user index number owner identityref</a>
<b>Tree</b>	<a href="#">owner</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">bgp</a> The BGP/MP-BGP protocol carrying labels.</li> <li>• <a href="#">ldp</a> The label distribution protocol (LDP).</li> <li>• <a href="#">sr-isis</a> The IS-IS protocol with segment routing extensions</li> <li>• <a href="#">sr-ospf</a> The OSPFv2 protocol with segment routing extensions</li> <li>• <a href="#">sr-ospfv3</a> The OSPFv3 protocol with segment routing extensions</li> <li>• <a href="#">sr-policy</a> A pseudo protocol representing SR policies</li> <li>• <a href="#">static-mpls</a></li> </ul>

A pseudo protocol representing static MPLS routes

- `evpn`  
The BGP/EVPN protocol carrying labels.
- `network-instance`  
The module allocating labels for bgp based vpn/evpn services

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static name** *string*

**Description** List of static label blocks

When a client application binds its operation to a static label block that client application is expected to specify the exact label value it wants to use every time it requests a label within the static label block.

**Context** [system mpls label-ranges static name](#) *string*

**Tree** [static](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

**Description** The name of the static label block

**Context** [system mpls label-ranges static name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **allocated-labels** *number*

**Description** The number of labels that are currently used in this block

**Context** [system mpls label-ranges static name](#) *string* [allocated-labels](#) *number*

**Tree** [allocated-labels](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **end-label** *number*

**Description** The ending label value of the label block.  
When the status is not-ready or updating, the state value may be different from the configured value

**Context** [system mpls label-ranges static name](#) *string* **end-label** *number*

**Tree** [end-label](#)

**Range** 16 to 1048575

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **free-labels** *number*

**Description** The number of labels that are currently available and free in this block.  
When the status is not-ready or updating, the state value may be different from the configured value

**Context** [system mpls label-ranges static name](#) *string* **free-labels** *number*

**Tree** [free-labels](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **shared** *boolean*

**Description** When set to true, the label block can be shared by multiple protocols. When set to false, the label block is dedicated to one protocol.

**Context** [system mpls label-ranges static name](#) *string* **shared** *boolean*

**Tree** [shared](#)

**Default** true

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-label** *number*

<b>Description</b>	The starting label value of the label block. When the status is not-ready or updating, the state value may be different from the configured value
<b>Context</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i> <a href="#">start-label</a> <i>number</i>
<b>Tree</b>	<a href="#">start-label</a>
<b>Range</b>	16 to 1048575
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**status** *keyword*

<b>Description</b>	The status of the MPLS label block
<b>Context</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i> <a href="#">status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ready The label block is ready to use.</li> <li>• not-ready The label block is not ready to use.</li> <li>• delete-pending The label block is in the process of being deleted.</li> <li>• updating The label block is available to use but the new limits do not apply yet.</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user** *index number*

<b>Description</b>	The list of protocols that are using this label block. If the block is not shared there will only be 1 user
<b>Context</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i> <a href="#">user</a> <i>index number</i>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index number**

**Description** Index number used to enumerate the clients

**Context** [system mpls label-ranges static name](#) *string* [user index number](#)

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **owner identityref**

**Description** The protocol or service associated with the client

**Context** [system mpls label-ranges static name](#) *string* [user index number](#) [owner identityref](#)

**Tree** [owner](#)

**Options**

- [bgp](#)  
The BGP/MP-BGP protocol carrying labels.
- [ldp](#)  
The label distribution protocol (LDP).
- [sr-isis](#)  
The IS-IS protocol with segment routing extensions
- [sr-ospf](#)  
The OSPFv2 protocol with segment routing extensions
- [sr-ospfv3](#)  
The OSPFv3 protocol with segment routing extensions
- [sr-policy](#)  
A pseudo protocol representing SR policies
- [static-mpls](#)  
A pseudo protocol representing static MPLS routes
- [evpn](#)  
The BGP/EVPN protocol carrying labels.
- [network-instance](#)  
The module allocating labels for bgp based vpn/evpn services

**Configurable** False

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## services

**Description** Container for system wide Services MPLS label management

**Context** [system mpls services](#)

**Tree** [services](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## evpn

**Description** Container for system wide Services EVPN MPLS label management

**Context** [system mpls services evpn](#)

**Tree** [evpn](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic-label-block *reference*

**Description** Reference to a dynamic label block

**Context** [system mpls services evpn dynamic-label-block \*reference\*](#)

**Tree** [dynamic-label-block](#)

**Reference** [system mpls label-ranges dynamic name \*string\*](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## network-instance

**Description** Container for system wide Service Network Instance MPLS label management

**Context** [system mpls services network-instance](#)

**Tree** [network-instance](#)



<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **dynamic-evpn-inclusive-multicast-label-block** *reference*

<b>Description</b>	Reference to the dynamic evpn inclusive multicast label block used by EVPN MAC-VRFs  The label block is used by EVPN-MPLS MAC-VRF services for the allocation of labels that are advertised in EVPN Inclusive Multicast Ethernet Tag routes and that identify incoming layer-2 Broadcast, Unknown unicast and Multicast traffic.
<b>Context</b>	<a href="#">system mpls services network-instance dynamic-evpn-inclusive-multicast-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">dynamic-evpn-inclusive-multicast-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **dynamic-label-block** *reference*

<b>Description</b>	Reference to the dynamic label block used by network-instances  The label block is used by all the applications that require MPLS label allocation in a network-instance. For example, EVPN-MPLS services, IP-VPN or Pseudowires.
<b>Context</b>	<a href="#">system mpls services network-instance dynamic-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">dynamic-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges dynamic name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **static-label-block** *reference*

<b>Description</b>	Reference to the static label block used by network-instances  The label block is used by all the applications that require static MPLS label allocation in a network-instance. For example, Pseudowires with static vc labels.
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<b>Context</b>	<a href="#">system mpls services network-instance static-label-block</a> <i>reference</i>
<b>Tree</b>	<a href="#">static-label-block</a>
<b>Reference</b>	<a href="#">system mpls label-ranges static name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## mtu

<b>Description</b>	Top-level container for configuration and state data related to the system MTU
<b>Context</b>	<a href="#">system mtu</a>
<b>Tree</b>	<a href="#">mtu</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## default-ip-mtu *number*

<b>Description</b>	System default IP MTU in bytes including the IP header but excluding Ethernet overhead  The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum IP MTU of 9398 bytes.  The 7730 SXR systems support a maximum IP MTU of 9394 bytes.
<b>Context</b>	<a href="#">system mtu default-ip-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">default-ip-mtu</a>
<b>Range</b>	1280 to 9486
<b>Default</b>	1500
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## default-l2-mtu *number*

<b>Description</b>	System default Layer-2 MTU in bytes for bridged subinterfaces  It includes the ethernet overhead and VLAN tags but excludes 4-bytes FCS. The default-l2-mtu is also used as the oper-mac-vrf-mtu and oper-vpws-mtu value if the network-instance does not have subinterfaces.
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The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum L2 MTU of 9412 bytes.

The 7730 SXR systems support a maximum L2 MTU of 9408 bytes.

<b>Context</b>	<a href="#">system mtu default-l2-mtu number</a>
<b>Tree</b>	<a href="#">default-l2-mtu</a>
<b>Range</b>	1500 to 9500
<b>Default</b>	9232
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **default-mpls-mtu number**

**Description** System default MPLS MTU in bytes including the size of the transmitted label stack.

The 7730 SXR systems support a maximum MPLS MTU of 9404 bytes.

<b>Context</b>	<a href="#">system mtu default-mpls-mtu number</a>
<b>Tree</b>	<a href="#">default-mpls-mtu</a>
<b>Range</b>	1284 to 9496
<b>Default</b>	1508
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **default-port-mtu number**

**Description** System default port MTU in bytes including ethernet overhead but excluding 4-bytes FCS

The 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D3, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, and 7220 IXR-H4 systems support a maximum port MTU of 9412 bytes.

The 7730 SXR systems support a maximum port MTU of 9408 bytes.

<b>Context</b>	<a href="#">system mtu default-port-mtu number</a>
<b>Tree</b>	<a href="#">default-port-mtu</a>
<b>Range</b>	1500 to 9500

<b>Default</b>	9232
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **min-path-mtu** *number*

<b>Description</b>	Sets the minimum path MTU to use when receiving an ICMP fragmentation needed message  The 7730 SXR systems support a maximum min path MTU of 9176 bytes. This is controlled via the kernel min_pmtu option. In the event an ICMP fragmentation needed message is received by the kernel, the system will drop the session to this MTU to allow packets to traverse the entire path.
<b>Context</b>	<a href="#">system mtu min-path-mtu</a> <i>number</i>
<b>Tree</b>	<a href="#">min-path-mtu</a>
<b>Range</b>	552 to 9232
<b>Default</b>	552
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **multicast**

<b>Description</b>	system multicast information
<b>Context</b>	<a href="#">system multicast</a>
<b>Tree</b>	<a href="#">multicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **multicast-ids**

<b>Description</b>	system multicast id information
<b>Context</b>	<a href="#">system multicast multicast-ids</a>
<b>Tree</b>	<a href="#">multicast-ids</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system multicast multicast-ids statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**current-usage** *number*

<b>Description</b>	The total number of multicast ids that are in use on the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics current-usage</a> <i>number</i>
<b>Tree</b>	<a href="#">current-usage</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**maximum-ids** *number*

<b>Description</b>	Maximum number of multicast ids available in the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics maximum-ids</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-ids</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**multicast-id-user-type** [user](#) *keyword*

<b>Description</b>	the type of the user of multicast id in the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics multicast-id-user-type</a> <a href="#">user</a> <i>keyword</i>
<b>Tree</b>	<a href="#">multicast-id-user-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**user** *keyword*

<b>Description</b>	Enter the user context
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<b>Context</b>	<a href="#">system multicast multicast-ids statistics multicast-id-user-type user</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-vrf</li> <li>• vxlan-interface</li> <li>• l2-proxy-arp-nd</li> <li>• mfib</li> <li>• mac-vrf-bgp-evpn</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**current-usage** *number*

<b>Description</b>	The total number of multicast ids that are in use on the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics multicast-id-user-type user</a> <i>keyword</i> <a href="#">current-usage</a> <i>number</i>
<b>Tree</b>	<a href="#">current-usage</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-pending** *number*

<b>Description</b>	The total number of multicast ids pending allocation on the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics multicast-id-user-type user</a> <i>keyword</i> <a href="#">total-pending</a> <i>number</i>
<b>Tree</b>	<a href="#">total-pending</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-pending** *number*

<b>Description</b>	The total number of multicast ids pending allocation on the system.
<b>Context</b>	<a href="#">system multicast multicast-ids statistics total-pending</a> <i>number</i>
<b>Tree</b>	<a href="#">total-pending</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** Supported on all platforms

## multicast-forwarding-information-base

**Description** System Multicast Forwarding Information Base table

**Context** [system multicast-forwarding-information-base](#)

**Tree** [multicast-forwarding-information-base](#)

**Configurable** False

**Platforms** Supported on all platforms

## multicast-route [network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\)](#)

**Description** List of all the MFIB entries in the system

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\)](#)

**Tree** [multicast-route](#)

**Configurable** False

**Platforms** Supported on all platforms

## network-instance [reference](#)

**Description** Indicates that the MFIB entry is associated to this network instance

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\)](#)

**Reference** [network-instance name string](#)

**Configurable** False

**Platforms** Supported on all platforms

## source [\(ipv4-address | ipv6-address\)](#)

**Description** Source IP address of the MFIB entry

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\)](#)

**Configurable** False

**Platforms** Supported on all platforms

### **group** (*ipv4-address* | *ipv6-address*)

**Description** Multicast group address of the MFIB entry

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\)](#)

**Configurable** False

**Platforms** Supported on all platforms

### **last-update** *string*

**Description** Last update of this MFIB entry

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\) last-update string](#)

**Tree** [last-update](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** Supported on all platforms

### **line-card-replication-index** *number*

**Description** Line card Replication Index (LRID) allocated by mfib\_mgr  
Upon programming an MFIB entry, mfib\_mgr requests a Multicast Identifier (MCID) to mcid\_mgr and based on the response with an allocated MCID, mfib\_mgr allocates a LRID for the entry. A value 0 indicates that no MCID was received for the entry, and therefore the MFIB entry cannot forward multicast traffic.

**Context** [system multicast-forwarding-information-base multicast-route network-instance reference source \(ipv4-address | ipv6-address\) group \(ipv4-address | ipv6-address\) line-card-replication-index number](#)

**Tree** [line-card-replication-index](#)

**Default** 0

**Configurable** False

**Platforms** Supported on all platforms



**name**

<b>Description</b>	Contains configuration and state related to system naming
<b>Context</b>	<a href="#">system name</a>
<b>Tree</b>	<a href="#">name</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**domain-name** *string*

<b>Description</b>	The system domain name
<b>Context</b>	<a href="#">system name domain-name</a> <i>string</i>
<b>Tree</b>	<a href="#">domain-name</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**host-name** *string*

<b>Description</b>	The system host name
<b>Context</b>	<a href="#">system name host-name</a> <i>string</i>
<b>Tree</b>	<a href="#">host-name</a>
<b>String Length</b>	1 to 63
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**netconf-server** [name](#) *string*

<b>Description</b>	Configures the NETCONF server instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i>
<b>Tree</b>	<a href="#">netconf-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	NETCONF service instance name
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i>
<b>String Length</b>	1 to 247
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Administratively enable or disable the NETCONF server instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-oper-change** *string*

<b>Description</b>	NETCONF last operational state change Time of last change of operational state of NETCONF server instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">last-oper-change</a> <i>string</i>
<b>Tree</b>	<a href="#">last-oper-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state keyword**

<b>Description</b>	Details if the NETCONF server instance is operationally available
<b>Context</b>	<code>system netconf-server name string oper-state keyword</code>
<b>Tree</b>	<code>oper-state</code>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li> <li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li> </ul>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-limit *number*

<b>Description</b>	Set a limit on the number of simultaneous active NETCONF sessions A session is defined as an individual client connection over which a NETCONF session has been started by providing bi-directional <hello> messages
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">session-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">session-limit</a>
<b>Range</b>	1 to 64
<b>Default</b>	64
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ssh-server *reference*

<b>Description</b>	The SSH server instance to bind the NETCONF server to
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">ssh-server</a> <i>reference</i>
<b>Tree</b>	<a href="#">ssh-server</a>
<b>Reference</b>	<a href="#">system ssh-server name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### active-sessions *number*

<b>Description</b>	Active NETCONF sessions  The total number of active NETCONF sessions. A session is defined as an individual client connection over which a NETCONF session has been started by providing bi-directional <hello> messages
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics active-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">active-sessions</a>
<b>Range</b>	1 to 64
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session [session-id](#) *number*

<b>Description</b>	Enter the session list instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session</a> <a href="#">session-id</a> <i>number</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-id *number*

<b>Description</b>	Enter the session-id context
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session</a> <a href="#">session-id</a> <i>number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **action-requests** *number*

**Description** NETCONF <action> requests  
Number of <action> NETCONF requests that have been accepted and processed by the NETCONF server

**Context** [system netconf-server name](#) *string* [statistics session session-id](#) *number* [action-requests](#) *number*

**Tree** [action-requests](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **commit-requests** *number*

**Description** NETCONF <commit> requests  
Number of commit NETCONF requests that have been accepted and processed by the NETCONF server

**Context** [system netconf-server name](#) *string* [statistics session session-id](#) *number* [commit-requests](#) *number*

**Tree** [commit-requests](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **copy-config-requests** *number*

**Description** NETCONF <copy-config> requests  
Number of copy-config NETCONF requests that have been accepted and processed by the NETCONF server

<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">copy-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">copy-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **delete-config-requests** *number*

<b>Description</b>	NETCONF <delete-config> requests Number of <delete-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">delete-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">delete-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **discard-changes-requests** *number*

<b>Description</b>	NETCONF <discard-changes> requests Number of <discard-changes> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">discard-changes-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">discard-changes-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**edit-config-requests** *number*

<b>Description</b>	NETCONF <edit-config> requests Number of <edit-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">edit-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">edit-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**edit-data-requests** *number*

<b>Description</b>	NETCONF <edit-data> requests Number of <edit-data> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">edit-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">edit-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**failed-edit-config-requests** *number*

<b>Description</b>	Failed NETCONF <edit-config> requests Number of <edit-config> NETCONF requests that have failed because of locks taken by other NETCONF sessions
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">failed-edit-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-edit-config-requests</a>
<b>Default</b>	0



<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **failed-edit-data-requests** *number*

<b>Description</b>	Failed NETCONF <edit-data> requests Number of <edit-data> NETCONF requests that have failed because of locks taken by other NETCONF sessions
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">failed-edit-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-edit-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **failed-lock-requests** *number*

<b>Description</b>	Failed NETCONF <lock> requests Number of <lock> NETCONF requests that have failed because of locks taken by other NETCONF sessions
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">failed-lock-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-lock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **get-config-requests** *number*

<b>Description</b>	NETCONF <get-config> requests
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	Number of <get-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">get-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">get-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### get-data-requests *number*

<b>Description</b>	NETCONF <get-data> requests Number of <get-data> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">get-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">get-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### get-requests *number*

<b>Description</b>	NETCONF <get> requests Number of <get> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">get-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">get-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **get-schema-requests** *number*

<b>Description</b>	NETCONF <get-schema> requests Number of <get-schema> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">get-schema-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">get-schema-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **in-bad-hellos** *number*

<b>Description</b>	Inbound bad NETCONF hello messages Number of bad NETCONF hello messages that have been received by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">in-bad-hellos</a> <i>number</i>
<b>Tree</b>	<a href="#">in-bad-hellos</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **kill-session-requests** *number*

<b>Description</b>	NETCONF <kill-session> requests Number of <kill-session> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">kill-session-requests</a> <i>number</i>

<b>Tree</b>	<a href="#">kill-session-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lock-requests *number*

<b>Description</b>	NETCONF <lock> requests Number of <lock> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name string statistics session session-id number lock-requests number</a>
<b>Tree</b>	<a href="#">lock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### process-id *number*

<b>Description</b>	The process ID of the NETCONF session
<b>Context</b>	<a href="#">system netconf-server name string statistics session session-id number process-id number</a>
<b>Tree</b>	<a href="#">process-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### unlock-requests *number*

<b>Description</b>	NETCONF <unlock> requests
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	Number of <unlock> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">unlock-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">unlock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **validate-requests** *number*

<b>Description</b>	NETCONF <validate> requests Number of <validate> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics session session-id</a> <i>number</i> <a href="#">validate-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">validate-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-action-requests** *number*

<b>Description</b>	NETCONF <action> requests Total number of <action> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-action-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-action-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-close-session-requests** *number*

<b>Description</b>	NETCONF <close-session> requests Total number of <close-session> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-close-session-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-close-session-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-commit-requests** *number*

<b>Description</b>	NETCONF <commit> requests Total number of commit NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-commit-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-commit-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-copy-config-requests** *number*

<b>Description</b>	NETCONF <copy-config> requests Total number of copy-config NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-copy-config-requests</a> <i>number</i>

<b>Tree</b>	<a href="#">total-copy-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-delete-config-requests** *number*

<b>Description</b>	NETCONF <delete-config> requests Total number of <delete-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-delete-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-delete-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-discard-changes-requests** *number*

<b>Description</b>	NETCONF <discard-changes> requests Total number of <discard-changes> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-discard-changes-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-discard-changes-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-dropped-sessions** *number*

<b>Description</b>	NETCONF dropped sessions Total number of dropped NETCONF sessions
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-dropped-sessions</a> <i>number</i>
<b>Tree</b>	<a href="#">total-dropped-sessions</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-edit-config-requests** *number*

<b>Description</b>	NETCONF <edit-config> requests Total number of <edit-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-edit-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-edit-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-edit-data-requests** *number*

<b>Description</b>	NETCONF <edit-data> requests Total number of <edit-data> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-edit-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-edit-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-error-responses** *number*

**Description** NETCONF error responses  
Total number of NETCONF error responses that have been generated and sent by the NETCONF server

**Context** [system netconf-server name](#) *string* [statistics total-error-responses](#) *number*

**Tree** [total-error-responses](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-failed-edit-config-requests** *number*

**Description** Failed NETCONF <edit-config> requests  
Total number of <edit-config> NETCONF requests that have failed because of locks taken by other NETCONF sessions

**Context** [system netconf-server name](#) *string* [statistics total-failed-edit-config-requests](#) *number*

**Tree** [total-failed-edit-config-requests](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-failed-edit-data-requests** *number*

**Description** Failed NETCONF <edit-data> requests  
Total number of <edit-data> NETCONF requests that have failed because of locks taken by other NETCONF sessions

<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-failed-edit-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-failed-edit-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-failed-lock-requests** *number*

<b>Description</b>	Failed NETCONF <lock> requests Total number of <lock> NETCONF requests that have failed because of locks taken by other NETCONF sessions
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-failed-lock-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-failed-lock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-get-config-requests** *number*

<b>Description</b>	NETCONF <get-config> requests Total number of <get-config> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-get-config-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-get-config-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-get-data-requests** *number*

<b>Description</b>	NETCONF <get-data> requests Total number of <get-data> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-get-data-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-get-data-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-get-requests** *number*

<b>Description</b>	NETCONF <get> requests Total number of <get> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-get-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-get-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-get-schema-requests** *number*

<b>Description</b>	NETCONF <get-schema> requests Total number of <get-schema> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-get-schema-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-get-schema-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-in-bad-hellos** *number*

**Description** Inbound bad NETCONF hello messages  
Total number of bad NETCONF hello messages that have been received by the NETCONF server

**Context** [system netconf-server name](#) *string* [statistics total-in-bad-hellos](#) *number*

**Tree** [total-in-bad-hellos](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-kill-session-requests** *number*

**Description** NETCONF <kill-session> requests  
Total number of <kill-session> NETCONF requests that have been accepted and processed by the NETCONF server

**Context** [system netconf-server name](#) *string* [statistics total-kill-session-requests](#) *number*

**Tree** [total-kill-session-requests](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **total-lock-requests** *number*

**Description** NETCONF <lock> requests  
Total number of <lock> NETCONF requests that have been accepted and processed by the NETCONF server

<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-lock-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-lock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-requests** *number*

<b>Description</b>	NETCONF total requests Total number of NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-responses** *number*

<b>Description</b>	NETCONF total responses Total number of NETCONF responses that have been generated and sent by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-responses</a> <i>number</i>
<b>Tree</b>	<a href="#">total-responses</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-unlock-requests** *number*

<b>Description</b>	NETCONF <unlock> requests Total number of <unlock> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-unlock-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-unlock-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**total-validate-requests** *number*

<b>Description</b>	NETCONF <validate> requests Total number of <validate> NETCONF requests that have been accepted and processed by the NETCONF server
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics total-validate-requests</a> <i>number</i>
<b>Tree</b>	<a href="#">total-validate-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options**

<b>Description</b>	Debug trace-options for NETCONF
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">trace-options</a>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**direction** *keyword*

<b>Description</b>	Direction to trace messages
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">trace-options</a> <a href="#">direction</a> <i>keyword</i>
<b>Tree</b>	<a href="#">direction</a>
<b>Default</b>	both
<b>Options</b>	<ul style="list-style-type: none"> <li>• both Trace input and output messages</li> <li>• input Trace input messages</li> <li>• output Trace output messages</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rpc** *keyword*

<b>Description</b>	RPC messages to trace
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">trace-options</a> <a href="#">rpc</a> <i>keyword</i>
<b>Tree</b>	<a href="#">rpc</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• action Trace &lt;action&gt; RPC messages</li> <li>• cancel-commit Trace &lt;cancel-commit&gt; RPC messages</li> <li>• close-session Trace &lt;close-session&gt; RPC messages</li> <li>• commit Trace &lt;commit&gt; RPC messages</li> <li>• copy-config Trace &lt;copy-config&gt; RPC messages</li> <li>• delete-config Trace &lt;delete-config&gt; RPC messages</li> <li>• discard-changes</li> </ul>

- Trace <discard-changes> RPC messages
- edit-config
  - Trace <edit-config> RPC messages
- edit-data
  - Trace <edit-data> RPC messages
- get-config
  - Trace <get-config> RPC messages
- get-data
  - Trace <get-data> RPC messages
- get-schema
  - Trace <get-schema> RPC messages
- get
  - Trace <get> RPC messages
- hello
  - Trace <hello> messages
- kill-session
  - Trace <kill-session> RPC messages
- lock
  - Trace <lock> RPC messages
- unknown
  - Trace messages that are unknown to the server
- unlock
  - Trace <unlock> RPC messages
- validate
  - Trace <validate> RPC messages

**Configurable**

True

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unix-socket****Description**

Create a new unix socket and bind the NETCONF service to it

**Context**[system netconf-server name](#) *string* [unix-socket](#)**Tree**[unix-socket](#)**Configurable**

True



**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### socket-path *string*

**Description** Path to the unix socket used by NETCONF

**Context** [system netconf-server name string unix-socket socket-path string](#)

**Tree** [socket-path](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance

**Description** Enable the network-instance context

**Context** [system network-instance](#)

**Tree** [network-instance](#)

**Configurable** True

**Platforms** Supported on all platforms

### protocols

**Description** The routing protocols that are enabled for this network-instance.

**Context** [system network-instance protocols](#)

**Tree** [protocols](#)

**Configurable** True

**Platforms** Supported on all platforms

### bgp-vpn

**Description** Enable the bgp-vpn context

**Context** [system network-instance protocols bgp-vpn](#)

**Tree** [bgp-vpn](#)

**Configurable** True

**Platforms** Supported on all platforms

### **bgp-instance id number**

**Description** List of bgp-vpn instances configured in the system network-instance. Only one instance allowed in the current release.

**Context** [system network-instance protocols bgp-vpn bgp-instance id number](#)

**Tree** [bgp-instance](#)

**Configurable** True

**Platforms** Supported on all platforms

**Max. Elements** 1

### **id number**

**Description** The index of the bgp-vpn instance

**Context** [system network-instance protocols bgp-vpn bgp-instance id number](#)

**Range** 1 to 2

**Configurable** True

**Platforms** Supported on all platforms

### **oper-down-reason keyword**

**Description** Reason for the system bgp-instance being down

**Context** [system network-instance protocols bgp-vpn bgp-instance id number oper-down-reason keyword](#)

**Tree** [oper-down-reason](#)

**Options**

- no-loopback-address
- no-esi
- none
- network-instance-oper-down
- bad-rd-format

**Configurable** False

**Platforms** Supported on all platforms

**route-distinguisher**

<b>Description</b>	Route Distinguisher (RD) of the bgp-vpn instance.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-distinguisher</a>
<b>Tree</b>	<a href="#">route-distinguisher</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rd** ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#))

<b>Description</b>	Route Distinguisher (RD) of the system bgp-vpn instance. The RD is auto-derived as <ip-address>:0 where 'ip-address' is the ipv4 address associated to the subinterface lo0.1.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-distinguisher rd</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> )
<b>Tree</b>	<a href="#">rd</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-distinguisher-origin** *keyword*

<b>Description</b>	Origin of the operational Route Distinguisher (RD) of the bgp-vpn instance. 'Auto-derived-from-system-ip:0' refers to the RD for the EVPN Ethernet Segment routes that is automatically allocated with the format <ip-address>:0 where 'ip-address' is the ipv4 address associated to the subinterface lo0.1.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-distinguisher route-distinguisher-origin keyword</a>
<b>Tree</b>	<a href="#">route-distinguisher-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-system-ip:0</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**route-target**

<b>Description</b>	Route Target (RT) of the system bgp-vpn instance.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-target</a>
<b>Tree</b>	<a href="#">route-target</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**export-route-target-origin** *keyword*

<b>Description</b>	Origin of the operational export Route Target (RT) of the bgp-vpn instance. 'Auto-derived-from-esi-bytes-1-6' refers to the ES-import RT for the EVPN Ethernet Segment routes that is derived from bytes 1 to 6 of the Ethernet Segment Identifier of the route.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-target export-route-target-origin keyword</a>
<b>Tree</b>	<a href="#">export-route-target-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-esi-bytes-1-6</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**import-route-target-origin** *keyword*

<b>Description</b>	Origin of the operational import Route Target (RT) of the bgp-vpn instance. 'Auto-derived-from-esi-bytes-1-6' refers to the ES-import RT for the EVPN Ethernet Segment routes that is derived from bytes 1 to 6 of the Ethernet Segment Identifier of the route.
<b>Context</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number route-target import-route-target-origin keyword</a>
<b>Tree</b>	<a href="#">import-route-target-origin</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• auto-derived-from-esi-bytes-1-6</li> <li>• none</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**evpn**

<b>Description</b>	Enable the evpn context
<b>Context</b>	<a href="#">system network-instance protocols evpn</a>
<b>Tree</b>	<a href="#">evpn</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ethernet-segments**

<b>Description</b>	Enable the ethernet-segments context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments</a>
<b>Tree</b>	<a href="#">ethernet-segments</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-instance id *reference***

<b>Description</b>	bgp global instances configured in net-instance
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference</a>
<b>Tree</b>	<a href="#">bgp-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**id *reference***

<b>Description</b>	Enter the id context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference</a>
<b>Reference</b>	<a href="#">system network-instance protocols bgp-vpn bgp-instance id number</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ethernet-segment** *name string*

<b>Description</b>	Ethernet Segment configuration and state.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id</a> <i>reference ethernet-segment name string</i>
<b>Tree</b>	<a href="#">ethernet-segment</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1024

### **name** *string*

<b>Description</b>	A unique name identifying the ethernet segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id</a> <i>reference ethernet-segment name string</i>
<b>String Length</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Admin state of the ethernet segment
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id</a> <i>reference ethernet-segment name string admin-state keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## association

**Description** Enter the association context

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association](#)

**Tree** [association](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## network-instance [name string](#)

**Description** network instance associated to this ethernet-segment

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string](#)

**Tree** [network-instance](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name [string](#)

**Description** Enter the name context

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bgp-instance** [instance number](#)

<b>Description</b>	bgp-instance associated to this ethernet-segment
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number</a>
<b>Tree</b>	<a href="#">bgp-instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance number**

<b>Description</b>	Enter the instance context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**computed-designated-forwarder-candidates**

<b>Description</b>	Enter the computed-designated-forwarder-candidates context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number computed-designated-forwarder-candidates</a>
<b>Tree</b>	<a href="#">computed-designated-forwarder-candidates</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**designated-forwarder-candidate** [address \(ipv4-address | ipv6-address\)](#)

<b>Description</b>	designated forwarder candidates for this evi
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<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number computed-designated-forwarder-candidates designated-forwarder-candidate address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">designated-forwarder-candidate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address (ipv4-address | ipv6-address)**

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number computed-designated-forwarder-candidates designated-forwarder-candidate address (ipv4-address   ipv6-address)</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **add-time string**

<b>Description</b>	The date and time when the designated-forwarder-candidate was added to the designated forwarder candidate list for this evi
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number computed-designated-forwarder-candidates designated-forwarder-candidate address (ipv4-address   ipv6-address) add-time string</a>
<b>Tree</b>	<a href="#">add-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**designated-forwarder** *boolean*

<b>Description</b>	Indicates if this designated-forwarder-candidate is the designated-forwarder.
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">association</a> <a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-instance</a> <a href="#">instance</a> <a href="#">number</a> <a href="#">computed-designated-forwarder-candidates</a> <a href="#">designated-forwarder-candidate</a> <a href="#">address</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">designated-forwarder</a> <i>boolean</i>
<b>Tree</b>	<a href="#">designated-forwarder</a>
<b>Default</b>	false
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**designated-forwarder-activation-start-time** *string*

<b>Description</b>	Indicates the time at which the designated-forwarder activation timer started.
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">association</a> <a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-instance</a> <a href="#">instance</a> <a href="#">number</a> <a href="#">designated-forwarder-activation-start-time</a> <a href="#">string</a> <i>string</i>
<b>Tree</b>	<a href="#">designated-forwarder-activation-start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**designated-forwarder-activation-time** *number*

<b>Description</b>	Indicates the number of seconds for the activation timer to run, for this node to become the designated forwarder for this bgp instance.
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">association</a> <a href="#">network-instance</a> <a href="#">name</a> <a href="#">string</a> <a href="#">bgp-instance</a> <a href="#">instance</a> <a href="#">number</a> <a href="#">designated-forwarder-activation-time</a> <a href="#">number</a> <i>number</i>
<b>Tree</b>	<a href="#">designated-forwarder-activation-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### designated-forwarder-role-last-change *string*

**Description** Indicates the time at which the designated-forwarder role was changed.

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string association network-instance name string bgp-instance instance number designated-forwarder-role-last-change string](#)

**Tree** [designated-forwarder-role-last-change](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### autodiscovery-per-ethernet-segment-routes

**Description** Enter the autodiscovery-per-ethernet-segment-routes context

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes](#)

**Tree** [autodiscovery-per-ethernet-segment-routes](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### attr-id *reference*

**Description** Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index.

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes attr-id reference](#)

**Tree** [attr-id](#)

**Reference** [network-instance name string bgp-rib attr-sets attr-set index number](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### esi string

**Description** The Ethernet Segment Identifier encoded in the NLRI

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes esi string](#)

**Tree** [esi](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ethernet-tag-id number

**Description** The 32-bit Ethernet Tag ID encoded in the NLRI. The Ethernet Tag ID identifies a broadcast domain

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes ethernet-tag-id number](#)

**Tree** [ethernet-tag-id](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### label

**Description** The encoded label value and type in the EVPN NLRI

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes label](#)

**Tree** [label](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value number**

<b>Description</b>	The value of the label field  If the route is an EVPN MPLS route, the mpls-label is read out of the 20-bit high order value. If the route is an EVPN VXLAN route, the vni is read out of the 24-bit value. If the route is an EVPN SRv6 route, this field is set to zero if no transposition is used and set to a non-zero value if transposition is used. For all the cases, if this is an Auto-Discovery per ES route, this leaf is set to zero.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes label value number</a>
<b>Tree</b>	<a href="#">value</a>
<b>Range</b>	0 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**value-type keyword**

<b>Description</b>	Whether the encoded label value is an mpls-label, a vni or a transposed function or argument
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes label value-type keyword</a>
<b>Tree</b>	<a href="#">value-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mpls-label</li> <li>• vni</li> <li>• transposed-srv6-function</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor (ipv4-address-with-zone | ipv6-address-with-zone)**

<b>Description</b>	If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor
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<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes neighbor (ipv4-address-with-zone   ipv6-address-with-zone)</a>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### path-id number

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes path-id number</a>
<b>Tree</b>	<a href="#">path-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### route-distinguisher ([route-distinguisher-type-0](#) | [route-distinguisher-type-1](#) | [route-distinguisher-type-2](#) | [route-distinguisher-type-2b](#))

<b>Description</b>	The route distinguisher encoded in the NLRI
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string autodiscovery-per-ethernet-segment-routes route-distinguisher (route-distinguisher-type-0   route-distinguisher-type-1   route-distinguisher-type-2   route-distinguisher-type-2b)</a>
<b>Tree</b>	<a href="#">route-distinguisher</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### df-election

<b>Description</b>	Enter the df-election context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election</a>

<b>Tree</b>	<a href="#">df-election</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## algorithm

<b>Description</b>	Enter the algorithm context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm</a>
<b>Tree</b>	<a href="#">algorithm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## manual-alg

<b>Description</b>	Enable the manual-alg context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm manual-alg</a>
<b>Tree</b>	<a href="#">manual-alg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## primary-evi-range [start-evi number](#)

<b>Description</b>	evi range for this ethernet-segment
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm manual-alg primary-evi-range start-evi number</a>
<b>Tree</b>	<a href="#">primary-evi-range</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**start-evi number**

<b>Description</b>	start of the evi-range for this ethernet-segment
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm manual-alg primary-evi-range start-evi number</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**end-evi number**

<b>Description</b>	end of the evi-range for this ethernet-segment
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm manual-alg primary-evi-range start-evi number end-evi number</a>
<b>Tree</b>	<a href="#">end-evi</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-type keyword**

<b>Description</b>	Operational Designated Forwarder algorithm type for this ethernet-segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm oper-type keyword</a>
<b>Tree</b>	<a href="#">oper-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• default</li> <li>• preference</li> <li>• manual</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## preference-alg

<b>Description</b>	Enable the preference-alg context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm preference-alg</a>
<b>Tree</b>	<a href="#">preference-alg</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## capabilities

<b>Description</b>	Enter the capabilities context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm preference-alg capabilities</a>
<b>Tree</b>	<a href="#">capabilities</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ac-df keyword

<b>Description</b>	Attachment Circuit influenced DF Election.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm preference-alg capabilities ac-df keyword</a>
<b>Tree</b>	<a href="#">ac-df</a>
<b>Default</b>	include
<b>Options</b>	<ul style="list-style-type: none"> <li>• include</li> <li>• exclude</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**non-revertive *boolean***

<b>Description</b>	Non Revertive mode. If set to true, the 'Don't Preempt Me' capability is advertised in the ES route.
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">algorithm</a> <a href="#">preference-alg</a> <a href="#">capabilities</a> <a href="#">non-revertive</a> <i>boolean</i>
<b>Tree</b>	<a href="#">non-revertive</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-do-not-preempt *boolean***

<b>Description</b>	Operational do-not-preempt value
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">algorithm</a> <a href="#">preference-alg</a> <a href="#">oper-do-not-preempt</a> <i>boolean</i>
<b>Tree</b>	<a href="#">oper-do-not-preempt</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-preference-value *number***

<b>Description</b>	Operational Preference value
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">algorithm</a> <a href="#">preference-alg</a> <a href="#">oper-preference-value</a> <i>number</i>
<b>Tree</b>	<a href="#">oper-preference-value</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**preference-value** *number*

<b>Description</b>	Preference that is used to elect the designated forwarder
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm preference-alg preference-value</a> <i>number</i>
<b>Tree</b>	<a href="#">preference-value</a>
<b>Range</b>	0 to 65535
<b>Default</b>	32767
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type** *keyword*

<b>Description</b>	Designated Forwarder algorithm type for this ethernet-segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election algorithm type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	default
<b>Options</b>	<ul style="list-style-type: none"> <li>• default</li> <li>• preference</li> <li>• manual</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-standby-signaling-on-non-df**

<b>Description</b>	Enable the interface-standby-signaling-on-non-df context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election interface-standby-signaling-on-non-df</a>
<b>Tree</b>	<a href="#">interface-standby-signaling-on-non-df</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## timers

**Description** Enter the timers context

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election timers](#)

**Tree** [timers](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## activation-timer *number*

**Description** Remaining activation timer per Ethernet segment

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string df-election timers activation-timer number](#)

**Tree** [activation-timer](#)

**Range** 0 to 100

**Units** seconds

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## esi *string*

**Description** The 10-byte Ethernet Segment Identifier of the ethernet segment.  
ESI-0 or MAX-ESI values are not allowed. ESI values with bytes 1-6 all zeros are not allowed since they would produce a null ESI-import route-target.

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string esi string](#)

**Tree** [esi](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### esi-label *number*

**Description** The esi label allocated for this ethernet-segment.  
The esi-label is advertised by the EVPN Auto-Discovery-Ethernet-Segment Advertisement routes and it is expected on received EVPN packets that were generated as multicast packets from this ethernet-segments peers.

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string esi-label number](#)

**Tree** [esi-label](#)

**Range** 16 to 1048575

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ethernet-segment-routes

**Description** Enter the ethernet-segment-routes context

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string ethernet-segment-routes](#)

**Tree** [ethernet-segment-routes](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### attr-id *reference*

**Description** Leaf reference to networkinstance/protocols/bgp/rib/attr-sets/attr-set/index

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string ethernet-segment-routes attr-id reference](#)

**Tree** [attr-id](#)

**Reference** [network-instance name string bgp-rib attr-sets attr-set index number](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### esi string

**Description** The Ethernet Segment Identifier

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string ethernet-segment-routes esi string](#)

**Tree** [esi](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### neighbor (ipv4-address-with-zone | ipv6-address-with-zone)

**Description** If the route was learned from a BGP neighbor, this is the IPv4 or IPv6 address of that neighbor

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string ethernet-segment-routes neighbor \(ipv4-address-with-zone | ipv6-address-with-zone\)](#)

**Tree** [neighbor](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### originating-router (ipv4-address | ipv6-address)

**Description** The IPv4 or IPv6 address of the originating router

**Context** [system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string ethernet-segment-routes originating-router \(ipv4-address | ipv6-address\)](#)

**Tree** [originating-router](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**path-id** *number*

<b>Description</b>	Path identifier of the BGP route
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">ethernet-segment-routes</a> <a href="#">path-id</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">path-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**route-distinguisher** (*route-distinguisher-type-0* | *route-distinguisher-type-1* | *route-distinguisher-type-2* | *route-distinguisher-type-2b*)

<b>Description</b>	The route distinguisher encoded in the NLRI
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">ethernet-segment-routes</a> <a href="#">route-distinguisher</a> ( <a href="#">route-distinguisher-type-0</a>   <a href="#">route-distinguisher-type-1</a>   <a href="#">route-distinguisher-type-2</a>   <a href="#">route-distinguisher-type-2b</a> )
<b>Tree</b>	<a href="#">route-distinguisher</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** [ethernet-interface](#) *reference*

<b>Description</b>	Add a list entry for interface
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">ethernet-interface</a> <a href="#">reference</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

**ethernet-interface** *reference*

<b>Description</b>	Interface associated with the ethernet segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string interface ethernet-interface reference</a>
<b>Reference</b>	<a href="#">interface name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multi-homing-mode** *keyword*

<b>Description</b>	Multi-homing mode of the ethernet segment.  The state of this leaf can be different than the configured value in cases where the configured value is 'all-active' and the multi-homing mode advertised by the ES peers in the AD per-ES routes is 'single-active'. In this case, the state of this leaf will show 'single-active'.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string multi-homing-mode keyword</a>
<b>Tree</b>	<a href="#">multi-homing-mode</a>
<b>Default</b>	all-active
<b>Options</b>	<ul style="list-style-type: none"> <li>• all-active</li> <li>• single-active</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop** [l3-next-hop](#) (*ipv4-address | ipv6-address*)

<b>Description</b>	Enter the next-hop list instance
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string next-hop l3-next-hop (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	True



<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **I3-next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Layer-3 next-hop associated with the ethernet segment.
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">next-hop</a> <a href="#">I3-next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **evi** *start number*

<b>Description</b>	evi range for this ethernet-segment association
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">next-hop</a> <a href="#">I3-next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi</a> <a href="#">start</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">evi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1

### **start** *number*

<b>Description</b>	start of the evi-range for this ethernet-segment
<b>Context</b>	<a href="#">system</a> <a href="#">network-instance</a> <a href="#">protocols</a> <a href="#">evpn</a> <a href="#">ethernet-segments</a> <a href="#">bgp-instance</a> <a href="#">id</a> <a href="#">reference</a> <a href="#">ethernet-segment</a> <a href="#">name</a> <a href="#">string</a> <a href="#">next-hop</a> <a href="#">I3-next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">evi</a> <a href="#">start</a> <a href="#">number</a>
<b>Range</b>	1 to 65535
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-down-reason** *keyword*

<b>Description</b>	The reason for the ethernet-segment being down in the bgp-instance
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• admin-disabled</li> <li>• no-nexthop-address</li> <li>• no-originating-address</li> <li>• no-associated-interface</li> <li>• associated-interface-oper-down</li> <li>• no-esi</li> <li>• no-esi-label</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-esi** *string*

<b>Description</b>	The operational Ethernet Segment Identifier used in the ethernet segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string oper-esi string</a>
<b>Tree</b>	<a href="#">oper-esi</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-multi-homing-mode** *keyword*

<b>Description</b>	Operational Multi-homing mode of the ethernet segment. The state of this leaf can be different than the configured value in cases where the configured value is 'all-active' and the multi-homing mode advertised by the ES peers in the AD per-ES routes is 'single-active'. In this case, the state of this leaf will show 'single-active'.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string oper-multi-homing-mode keyword</a>

<b>Tree</b>	<a href="#">oper-multi-homing-mode</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all-active</li> <li>• single-active</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	This leaf contains the operational state of ethernet segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> <li>• low-power Component is offline due to insufficient system power</li> <li>• degraded Component or process is in a degraded state</li> <li>• warm-reboot</li> </ul>

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the `reinvoke-with-delay` action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## routes

**Description**

Enter the routes context

**Context**

[system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string routes](#)

**Tree**

[routes](#)

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ethernet-segment

**Description**

Enter the ethernet-segment context

**Context**

[system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string routes ethernet-segment](#)

**Tree**

[ethernet-segment](#)

**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## originating-ip *keyword*

**Description**

The originating ip-address that the inclusive multicast route will be advertised with in this evpn instance

<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string routes ethernet-segment originating-ip keyword</a>
<b>Tree</b>	<a href="#">originating-ip</a>
<b>Default</b>	use-system-ipv4-address
<b>Options</b>	<ul style="list-style-type: none"> <li>• use-system-ipv4-address</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**next-hop keyword**

<b>Description</b>	The ip-address that will be used as the bgp-next hop for all ES and AD per-ES routes advertised for this Ethernet Segment.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string routes next-hop keyword</a>
<b>Tree</b>	<a href="#">next-hop</a>
<b>Default</b>	use-system-ipv4-address
<b>Options</b>	<ul style="list-style-type: none"> <li>• use-system-ipv4-address</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**type keyword**

<b>Description</b>	Ethernet Segment type.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments bgp-instance id reference ethernet-segment name string type keyword</a>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	none
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• virtual</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timers**

<b>Description</b>	Enter the timers context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments timers</a>
<b>Tree</b>	<a href="#">timers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**activation-timer *number***

<b>Description</b>	Enter the activation-timer context
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments timers activation-timer <i>number</i></a>
<b>Tree</b>	<a href="#">activation-timer</a>
<b>Range</b>	0 to 100
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**boot-remaining-time *number***

<b>Description</b>	Indicates the number of seconds remaining for the boot timer to expire.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments timers boot-remaining-time <i>number</i></a>
<b>Tree</b>	<a href="#">boot-remaining-time</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**boot-start-time *string***

<b>Description</b>	Indicates the time at which the boot timer started.
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments timers boot-start-time <i>string</i></a>
<b>Tree</b>	<a href="#">boot-start-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**boot-timer *number***

<b>Description</b>	Remaining time before running BGP EVPN multi-homing DF election algorithm
<b>Context</b>	<a href="#">system network-instance protocols evpn ethernet-segments timers boot-timer <i>number</i></a>
<b>Tree</b>	<a href="#">boot-timer</a>
<b>Range</b>	0 to 6000
<b>Default</b>	10
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**multicast**

<b>Description</b>	Enable the multicast context
<b>Context</b>	<a href="#">system network-instance protocols evpn multicast</a>
<b>Tree</b>	<a href="#">multicast</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**leave-sync-propagation *number***

<b>Description</b>	This value is the delta time applied by a node sending the leave synch route before removing the multicast state  When EVPN multi-homing is used along with igmp/mld snooping, a node receiving a leave message from a receiver will advertise an EVPN Multicast Leave Sync route to synchronize the leave state across all nodes attached to the Ethernet Segment. This route encodes the maximum response time that the receiving node needs to apply for a given (S,G) or (*,G) state before removing it. The leave-sync-propagation time accounts for the BGP propagation time so that the local node minimizes the potential churn of removing the multicast state before the route made it to the node receiving a join for the multicast group to be removed. The value must be adjusted to the estimated BGP propagation time between the Ethernet Segment peers.
<b>Context</b>	<a href="#">system network-instance protocols evpn multicast leave-sync-propagation number</a>
<b>Tree</b>	<a href="#">leave-sync-propagation</a>
<b>Range</b>	0 to 300
<b>Default</b>	5
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**ntp**

<b>Description</b>	Top-level container for NTP configuration and state
<b>Context</b>	<a href="#">system ntp</a>
<b>Tree</b>	<a href="#">ntp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**admin-state *keyword***

<b>Description</b>	Enables the system NTP client and indicates that the system should attempt to synchronize the clock
<b>Context</b>	<a href="#">system ntp admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> </ul>



	<ul style="list-style-type: none"> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### network-instance *reference*

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">system ntp network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### oper-state *keyword*

<b>Description</b>	Details the operational state of the NTP client
<b>Context</b>	<a href="#">system ntp oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> </ul>

- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **server** [address](#) (*ipv4 | ipv6 | domain-name*)

<b>Description</b>	List of NTP servers to use for system clock synchronization
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> )
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **address** (*ipv4 | ipv6 | domain-name*)

<b>Description</b>	Domain or IP address of the NTP server IP address may be either IPv4 or IPv6. Domain resolution requires working DNS configuration in the same network-instance.
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> )
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**iburst** *boolean*

<b>Description</b>	Indicates whether this server should enable burst synchronization or not iburst, or initial burst, improves the time taken for initial synchronization by sending a burst of eight packets instead of the usual one, these packets are spaced by a two second delay
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> ) <b>iburst</b> <i>boolean</i>
<b>Tree</b>	<a href="#">iburst</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**jitter** *number*

<b>Description</b>	Measurement of the variance in latency on the network
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> ) <b>jitter</b> <i>number</i>
<b>Tree</b>	<a href="#">jitter</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**offset** *number*

<b>Description</b>	Estimate of the current time offset from the peer This is the time difference between the local and reference clock.
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> ) <b>offset</b> <i>number</i>
<b>Tree</b>	<a href="#">offset</a>
<b>Units</b>	microseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**poll-interval** *number*

<b>Description</b>	Polling interval of the peer
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> ) <b>poll-interval</b> <i>number</i>
<b>Tree</b>	<a href="#">poll-interval</a>
<b>Units</b>	seconds

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**prefer** *boolean*

<b>Description</b>	Indicates whether this server should be preferred or not. All other things being equal, this host will be chosen for synchronization among a set of correctly operating NTP servers.
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4</i>   <i>ipv6</i>   <i>domain-name</i> ) <a href="#">prefer</a> <i>boolean</i>
<b>Tree</b>	<a href="#">prefer</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**root-delay** *number*

<b>Description</b>	The round-trip delay to the server.
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4</i>   <i>ipv6</i>   <i>domain-name</i> ) <a href="#">root-delay</a> <i>number</i>
<b>Tree</b>	<a href="#">root-delay</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**root-dispersion** *number*

<b>Description</b>	Dispersion (epsilon) represents the maximum error inherent in the measurement.
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4</i>   <i>ipv6</i>   <i>domain-name</i> ) <a href="#">root-dispersion</a> <i>number</i>
<b>Tree</b>	<a href="#">root-dispersion</a>
<b>Units</b>	milliseconds
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**stratum number**

<b>Description</b>	Indicates the level of the server in the NTP hierarchy as number increases, the accuracy is degraded. Primary servers are stratum 1 while a maximum value of 16 indicates unsynchronized. The values have the following meanings: 0 unspecified or invalid 1 primary server (e.g., equipped with a GPS receiver) 2-15 secondary server (via NTP) 16 unsynchronized 17-255 reserved
<b>Context</b>	<a href="#">system ntp server address</a> ( <i>ipv4   ipv6   domain-name</i> ) <a href="#">stratum number</a>
<b>Tree</b>	<a href="#">stratum</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address | ipv6-address*)

<b>Description</b>	Source address for NTP to use for messages sent to a remote server
<b>Context</b>	<a href="#">system ntp source-address</a> ( <i>ipv4-address   ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**synchronized** (*ipv4-address | ipv6-address | domain-name | string*)

<b>Description</b>	Address of the NTP server that the local client is synchronized to This field is set to 'unsynchronized', if the local client is not synchronized
<b>Context</b>	<a href="#">system ntp synchronized</a> ( <i>ipv4-address   ipv6-address   domain-name   string</i> )
<b>Tree</b>	<a href="#">synchronized</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**packet-link-qualification**

<b>Description</b>	Top-level container for gNOI Packet Link Qualification profiles
<b>Context</b>	<a href="#">system packet-link-qualification</a>
<b>Tree</b>	<a href="#">packet-link-qualification</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### profile *name string*

**Description** List of configured Packet Link Qualification profiles

**Context** [system packet-link-qualification profile name string](#)

**Tree** [profile](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### name *string*

**Description** Name of the Packet Link Qualification profile

**Context** [system packet-link-qualification profile name string](#)

**String Length** 1 to 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### asic-loopback

**Description** ASIC loopback  
Use the ASIC loopback mode

**Context** [system packet-link-qualification profile name string asic-loopback](#)

**Tree** [asic-loopback](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### ntp

**Description** Enter the ntp context

**Context** [system packet-link-qualification profile name string ntp](#)

**Tree** [ntp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **end-time** *string*

**Description** End time of the test

**Context** [system packet-link-qualification profile name](#) *string ntp end-time string*

**Tree** [end-time](#)

**String Length** 20 to 32

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **start-time** *string*

**Description** Start time of the test

**Context** [system packet-link-qualification profile name](#) *string ntp start-time string*

**Tree** [start-time](#)

**String Length** 20 to 32

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **teardown-time** *string*

**Description** Time at which the test should be torn down

**Context** [system packet-link-qualification profile name](#) *string ntp teardown-time string*

**Tree** [teardown-time](#)

**String Length** 20 to 32

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **packet-generator**

**Description** Packet generator endpoint

**Context** [system packet-link-qualification profile name](#) *string packet-generator*

<b>Tree</b>	<a href="#">packet-generator</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### packet-rate *number*

<b>Description</b>	Packet rate of the packet generator
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">packet-generator packet-rate number</a>
<b>Tree</b>	<a href="#">packet-rate</a>
<b>Range</b>	1 to 4294967295
<b>Units</b>	packets per second
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### packet-size *number*

<b>Description</b>	Packet size (in bytes) of the packet generator
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">packet-generator packet-size number</a>
<b>Tree</b>	<a href="#">packet-size</a>
<b>Range</b>	64 to 8184
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### rpc

<b>Description</b>	Enter the rpc context
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc</a>
<b>Tree</b>	<a href="#">rpc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**duration number**

<b>Description</b>	Duration of the test
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Range</b>	1 to 4294967295
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**post-sync-duration number**

<b>Description</b>	Duration of the post-sync phase
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc post-sync-duration number</a>
<b>Tree</b>	<a href="#">post-sync-duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**pre-sync-duration number**

<b>Description</b>	Duration of the pre-sync phase
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc pre-sync-duration number</a>
<b>Tree</b>	<a href="#">pre-sync-duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**setup-duration number**

<b>Description</b>	Duration of the setup phase
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<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc setup-duration number</a>
<b>Tree</b>	<a href="#">setup-duration</a>
<b>Range</b>	20 to 4294967295
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **teardown-duration number**

<b>Description</b>	Duration of the teardown phase
<b>Context</b>	<a href="#">system packet-link-qualification profile name</a> <i>string</i> <a href="#">rpc teardown-duration number</a>
<b>Tree</b>	<a href="#">teardown-duration</a>
<b>Range</b>	15 to 4294967295
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

### **protocols**

<b>Description</b>	The routing protocols that are supported by the system
<b>Context</b>	<a href="#">system protocols</a>
<b>Tree</b>	<a href="#">protocols</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **bgp**

<b>Description</b>	Enable the bgp context
<b>Context</b>	<a href="#">system protocols bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**restart-max-wait** *number*

<b>Description</b>	The maximum amount of time that BGP will wait to receive End of RIB markers from all peers and for all address families that were up prior to restart.  After this time elapses BGP declares that convergence has occurred and sends its own EOR markers to its peers.
<b>Context</b>	<a href="#">system protocols bgp restart-max-wait</a> <i>number</i>
<b>Tree</b>	<a href="#">restart-max-wait</a>
<b>Range</b>	0 to 3600
<b>Default</b>	600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ra-guard-policy** *name string*

<b>Description</b>	List containing RA Guard Policy and parameters
<b>Context</b>	<a href="#">system ra-guard-policy</a> <i>name string</i>
<b>Tree</b>	<a href="#">ra-guard-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	64

**name** *string*

<b>Description</b>	RA Guard Policy name
<b>Context</b>	<a href="#">system ra-guard-policy</a> <i>name string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**action** *keyword*

<b>Description</b>	Describes the RA Guard Policy action for RA Messages matching the specified attributes. RA Messages not matching the specified attributes will be handled in the opposite manner.
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
<b>Tree</b>	<a href="#">action</a>
<b>Default</b>	discard
<b>Options</b>	<ul style="list-style-type: none"> <li>• accept</li> <li>• discard</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**advertise-prefix-set** *reference*

<b>Description</b>	Reference to a prefix set to match advertised address within RA message
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">advertise-prefix-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">advertise-prefix-set</a>
<b>Reference</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**hop-limit** *number*

<b>Description</b>	Verifies the minimum advertised hop count limit, RA message value must be equal to or greater than hop-limit. If not specified the verification is skipped.
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">hop-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">hop-limit</a>
<b>Range</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**managed-config-flag** *boolean*

<b>Description</b>	Causes the RA Guard policy to match IPv6 RA messages with the M (Managed address) flag set. If not specified the verification is skipped.
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">managed-config-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">managed-config-flag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**other-config-flag** *boolean*

<b>Description</b>	Causes the RA Guard policy to match IPv6 RA messages with the O (Other config) flag set. If not specified the verification is skipped.
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">other-config-flag</a> <i>boolean</i>
<b>Tree</b>	<a href="#">other-config-flag</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**router-preference** *keyword*

<b>Description</b>	Verifies that the advertised default router preference parameter value is equal to or less than the specified limit. If not specified the verification is skipped.
<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">router-preference</a> <i>keyword</i>
<b>Tree</b>	<a href="#">router-preference</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• high</li> <li>• medium</li> <li>• low</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-prefix-set** *reference*

<b>Description</b>	Reference to a prefix set to match RA source address. If not specified the verification is skipped.
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<b>Context</b>	<a href="#">system ra-guard-policy name</a> <i>string</i> <a href="#">source-prefix-set</a> <i>reference</i>
<b>Tree</b>	<a href="#">source-prefix-set</a>
<b>Reference</b>	<a href="#">routing-policy prefix-set name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## sflow

<b>Description</b>	Context to configure sFlow Agent parameters and report sFlow state
<b>Context</b>	<a href="#">system sflow</a>
<b>Tree</b>	<a href="#">sflow</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## admin-state *keyword*

<b>Description</b>	Administratively enable or disable sFlow for the system
<b>Context</b>	<a href="#">system sflow admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## collector [collector-id](#) *number*

<b>Description</b>	List of sFlow collectors to which sFlow sample data is sent
<b>Context</b>	<a href="#">system sflow collector</a> <a href="#">collector-id</a> <i>number</i>
<b>Tree</b>	<a href="#">collector</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	8

**collector-id** *number*

<b>Description</b>	Specify the collector ID
<b>Context</b>	<a href="#">system sflow collector collector-id</a> <i>number</i>
<b>Range</b>	1 to 8
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**collector-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address for an sFlow collector
<b>Context</b>	<a href="#">system sflow collector collector-id</a> <i>number</i> <a href="#">collector-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">collector-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance** *reference*

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">system sflow collector collector-id</a> <i>number</i> <a href="#">network-instance</a> <i>reference</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance</a> <i>name</i> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**next-hop** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Specifies the active IP next hop used to reach the associated collector
<b>Context</b>	<a href="#">system sflow collector collector-id</a> <i>number</i> <a href="#">next-hop</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">next-hop</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**port number**

<b>Description</b>	Specifies the destination UDP port number to be used in sFlow packets
<b>Context</b>	<a href="#">system sflow collector collector-id number port number</a>
<b>Tree</b>	<a href="#">port</a>
<b>Default</b>	6343
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Specifies the IP address to be used as the source address in sFlow packets
<b>Context</b>	<a href="#">system sflow collector collector-id number source-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dscp number**

<b>Description</b>	Specify sFlow DSCP value This value specifies the DSCP value used in IP header of samples sent to the associated collectors.
<b>Context</b>	<a href="#">system sflow dscp number</a>
<b>Tree</b>	<a href="#">dscp</a>
<b>Range</b>	0 to 63
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**sample-rate number**

<b>Description</b>	Specify sFlow sample rate This value is the rate at which traffic will be sampled at a rate of 1:N received packets.
<b>Context</b>	<a href="#">system sflow sample-rate number</a>



<b>Tree</b>	<a href="#">sample-rate</a>
<b>Range</b>	1 to 2000000
<b>Default</b>	10000
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **sample-size** *number*

<b>Description</b>	Specify sFlow sample size This value specifies the number of bytes the sFlow agent samples from each frame.
<b>Context</b>	<a href="#">system sflow sample-size</a> <i>number</i>
<b>Tree</b>	<a href="#">sample-size</a>
<b>Range</b>	256   512
<b>Default</b>	256
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Specifies the IP address to be used as the source address in sFlow packets
<b>Context</b>	<a href="#">system sflow source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sflow statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-offered-packets** *number*

<b>Description</b>	Total number of packets subject to sFlow sampling
<b>Context</b>	<a href="#">system sflow statistics total-offered-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-offered-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-samples-taken** *number*

<b>Description</b>	Total number of sFlow samples taken
<b>Context</b>	<a href="#">system sflow statistics total-samples-taken</a> <i>number</i>
<b>Tree</b>	<a href="#">total-samples-taken</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**total-sent-packets** *number*

<b>Description</b>	Total number of sFlow packets sent to collectors
<b>Context</b>	<a href="#">system sflow statistics total-sent-packets</a> <i>number</i>
<b>Tree</b>	<a href="#">total-sent-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

**snmp**

<b>Description</b>	Top-level container for SNMP configuration and state
<b>Context</b>	<a href="#">system snmp</a>
<b>Tree</b>	<a href="#">snmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**access-group name string**

<b>Description</b>	List of configured SNMP access-groups
<b>Context</b>	<a href="#">system snmp access-group name string</a>
<b>Tree</b>	<a href="#">access-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name string**

<b>Description</b>	Name of the SNMP access-group
<b>Context</b>	<a href="#">system snmp access-group name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state keyword**

<b>Description</b>	Enables the SNMP access-group
<b>Context</b>	<a href="#">system snmp access-group name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**community-entry** *name string*

<b>Description</b>	List of configured SNMPv2 communities
<b>Context</b>	<a href="#">system snmp access-group name string</a> <a href="#">community-entry name string</a>
<b>Tree</b>	<a href="#">community-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Unique name for the SNMPv2 community.
<b>Context</b>	<a href="#">system snmp access-group name string</a> <a href="#">community-entry name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**community** *string*

<b>Description</b>	SNMPv2 community
<b>Context</b>	<a href="#">system snmp access-group name string</a> <a href="#">community-entry name string</a> <a href="#">community string</a>
<b>Tree</b>	<a href="#">community</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	Description for the SNMPv2 community
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<b>Context</b>	<a href="#">system snmp access-group name string community-entry name string description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix-list** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	Prefixes where this community can be used, both IPv4 and IPv6 addresses. A /32 or /128 mask can be used to limit it to a single ip-address
<b>Context</b>	<a href="#">system snmp access-group name string community-entry name string prefix-list (ipv4-prefix   ipv6-prefix)</a>
<b>Tree</b>	<a href="#">prefix-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	16

### **description** *string*

<b>Description</b>	Description for this access-group
<b>Context</b>	<a href="#">system snmp access-group name string description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **security-entry** *name string*

<b>Description</b>	List of configured SNMPv3 users
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<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i>
<b>Tree</b>	<a href="#">security-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Unique name of the SNMPv3 security
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**authentication**

<b>Description</b>	Authentication parameters for this user.
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**password** *string*

<b>Description</b>	The user authentication password, supplied either as cleartext or as a hashed value.  If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='
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<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">authentication password</a> <i>string</i>
<b>Tree</b>	<a href="#">password</a>
<b>String Length</b>	8 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**protocol** *keyword*

<b>Description</b>	Authentication protocol used by this user.
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">authentication protocol</a> <i>keyword</i>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	hmac-md5-96
<b>Options</b>	<ul style="list-style-type: none"> <li>hmac-md5-96 MD5</li> <li>hmac-sha1-96 SHA</li> <li>hmac-sha2-224 SHA-224</li> <li>hmac-sha2-256 SHA-256</li> <li>hmac-sha2-384 SHA-384</li> <li>hmac-sha2-512 SHA-512</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**description** *string*

<b>Description</b>	Description for this user
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<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## privacy

<b>Description</b>	Privacy parameters for this user.
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy</a>
<b>Tree</b>	<a href="#">privacy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## password *string*

<b>Description</b>	The user privacy password, supplied either as cleartext or as a hashed value. If not provided, authentication/password will be used.  If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy</a> <a href="#">password</a> <i>string</i>
<b>Tree</b>	<a href="#">password</a>
<b>String Length</b>	8 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**protocol keyword**

<b>Description</b>	Privacy protocol used by this user.
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy protocol</a> <i>keyword</i>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	cbc-des
<b>Options</b>	<ul style="list-style-type: none"> <li>• cbc-des DES</li> <li>• cfb128-aes-128 AES</li> <li>• cfb128-aes-192 AES-192</li> <li>• cfb128-aes-256 AES-256</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user string**

<b>Description</b>	User name used in SNMPv3 authentication and privacy
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">user</a> <i>string</i>
<b>Tree</b>	<a href="#">user</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**security-level keyword**

<b>Description</b>	Minimum security level required for this access-group.
<b>Context</b>	<a href="#">system snmp access-group name</a> <i>string</i> <a href="#">security-level</a> <i>keyword</i>

<b>Tree</b>	<a href="#">security-level</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-auth-no-priv</li> <li>• auth-no-priv</li> <li>• auth-priv</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance [name reference](#)

<b>Description</b>	List of network-instances to run an SNMP server in
<b>Context</b>	<a href="#">system snmp network-instance name reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	5

### name [reference](#)

<b>Description</b>	Reference to a configured network-instance
<b>Context</b>	<a href="#">system snmp network-instance name reference</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### admin-state [keyword](#)

<b>Description</b>	Enables the SNMP server in this network-instance
<b>Context</b>	<a href="#">system snmp network-instance name reference admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **engine-id** *string*

**Description** The local SNMP engine's administratively assigned unique identifier.  
If this leaf is not set, the device automatically calculates an engine ID, as described in RFC 3411.

**Context** [system snmp network-instance name](#) *reference* [engine-id](#) *string*

**Tree** [engine-id](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **error-msg** *string*

**Description** Indicates a possible error message if the snmp-server was stopped at runtime

**Context** [system snmp network-instance name](#) *reference* [error-msg](#) *string*

**Tree** [error-msg](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **listen-address** (*ipv4-address* | *ipv6-address*)

**Description** List of IP addresses for the SNMP server to listen on within the network-instance

**Context** [system snmp network-instance name](#) *reference* [listen-address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [listen-address](#)

**Default** ::

**Configurable** True

**Platforms** Supported on all platforms

**Max. Elements** 16

## **oper-state** keyword

<b>Description</b>	Details the operational state of the SNMP server
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">oper-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up Component or process is operational</li><li>• down Component or process is not operational</li><li>• empty Component slot is empty</li><li>• downloading Component is downloading image into memory</li><li>• booting Component is booting downloaded image</li><li>• starting Component image operational, application processes starting</li><li>• failed Component or process has failed</li><li>• synchronizing Component is currently being synchronized</li><li>• upgrading Component is currently being upgraded</li><li>• low-power Component is offline due to insufficient system power</li><li>• degraded Component or process is in a degraded state</li><li>• warm-reboot Component or process is currently warm rebooting This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.</li><li>• waiting Component or process is currently waiting This state can be set by event handler when the <code>reinvoke-with-delay</code> action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.</li></ul>

<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Container for snmp statistics, as defined by RFC 1213, RFC 3418, RFC 3414 and RFC 3412
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## snmp-in-asn-parse-errs *number*

<b>Description</b>	The total number of ASN.1 or BER errors encountered by the SNMP entity when decoding received SNMP messages.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-asn-parse-errs number</a>
<b>Tree</b>	<a href="#">snmp-in-asn-parse-errs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## snmp-in-bad-community-names *number*

<b>Description</b>	The total number of community-based SNMP messages (for example, SNMPv1) delivered to the SNMP entity which used an SNMP community name not known to said entity.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-bad-community-names number</a>
<b>Tree</b>	<a href="#">snmp-in-bad-community-names</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-bad-community-uses *number*

**Description** The total number of community-based SNMP messages (for example, SNMPv1) delivered to the SNMP entity which represented an SNMP operation that was not allowed for the SNMP community named in the message.

**Context** [system snmp network-instance name](#) *reference* [statistics snmp-in-bad-community-uses](#) *number*

**Tree** [snmp-in-bad-community-uses](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-bad-versions *number*

**Description** The total number of SNMP messages which were delivered to the SNMP entity and were for an unsupported SNMP version.

**Context** [system snmp network-instance name](#) *reference* [statistics snmp-in-bad-versions](#) *number*

**Tree** [snmp-in-bad-versions](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-gen-errs *number*

**Description** The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is 'genErr'.

**Context** [system snmp network-instance name](#) *reference* [statistics snmp-in-gen-errs](#) *number*

<b>Tree</b>	<a href="#">snmp-in-gen-errs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-get-nexts *number*

<b>Description</b>	The total number of SNMP Get-Next PDUs which have been accepted and processed by the SNMP protocol entity.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-get-nexts number</a>
<b>Tree</b>	<a href="#">snmp-in-get-nexts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-get-requests *number*

<b>Description</b>	The total number of SNMP Get-Request PDUs which have been accepted and processed by the SNMP protocol entity.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-get-requests number</a>
<b>Tree</b>	<a href="#">snmp-in-get-requests</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-in-pkts *number*

<b>Description</b>	The total number of messages delivered to the SNMP entity from the transport service.
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<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-pkts number</a>
<b>Tree</b>	<a href="#">snmp-in-pkts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **snmp-in-total-req-vars** *number*

<b>Description</b>	The total number of MIB objects which have been retrieved successfully by the SNMP protocol entity as the result of receiving valid SNMP Get-Request and Get-Next PDUs.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-in-total-req-vars number</a>
<b>Tree</b>	<a href="#">snmp-in-total-req-vars</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **snmp-invalid-msgs** *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because there were invalid or inconsistent components in the SNMP message.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-invalid-msgs number</a>
<b>Tree</b>	<a href="#">snmp-invalid-msgs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**snmp-out-gen-errs** *number*

<b>Description</b>	The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is 'genErr'.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-out-gen-errs number</a>
<b>Tree</b>	<a href="#">snmp-out-gen-errs</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**snmp-out-get-responses** *number*

<b>Description</b>	The total number of SNMP Get-Response PDUs which have been generated by the SNMP protocol entity.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-out-get-responses number</a>
<b>Tree</b>	<a href="#">snmp-out-get-responses</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**snmp-out-pkts** *number*

<b>Description</b>	The total number of SNMP Messages which were passed from the SNMP protocol entity to the transport service.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-out-pkts number</a>
<b>Tree</b>	<a href="#">snmp-out-pkts</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **snmp-out-traps** *number*

<b>Description</b>	The total number of SNMP Trap PDUs which have been generated by the SNMP protocol entity.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-out-traps number</a>
<b>Tree</b>	<a href="#">snmp-out-traps</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **snmp-silent-drops** *number*

<b>Description</b>	The total number of Confirmed Class PDUs (such as GetRequest-PDUs, GetNextRequest-PDUs, GetBulkRequest-PDUs, SetRequest-PDUs, and Inform Request-PDUs) delivered to the SNMP entity which were silently dropped because the size of a reply containing an alternate Response Class PDU (such as a Response-PDU) with an empty variable-bindings field was greater than either a local constraint or the maximum message size associated with the originator of the request.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics snmp-silent-drops number</a>
<b>Tree</b>	<a href="#">snmp-silent-drops</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **snmp-unknown-pdu-handlers** *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because the PDU contained in the packet could not be passed to an application responsible for handling the pduType, e.g. no SNMP
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	application had registered for the proper combination of the contextEngineID and the pduType.
<b>Context</b>	<a href="#">system snmp network-instance name reference statistics snmp-unknown-pdu-handlers number</a>
<b>Tree</b>	<a href="#">snmp-unknown-pdu-handlers</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### snmp-unknown-security-models *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because they referenced a securityModel that was not known to or supported by the SNMP engine.
<b>Context</b>	<a href="#">system snmp network-instance name reference statistics snmp-unknown-security-models number</a>
<b>Tree</b>	<a href="#">snmp-unknown-security-models</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### usm-stats-decryption-errors *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because they could not be decrypted.
<b>Context</b>	<a href="#">system snmp network-instance name reference statistics usm-stats-decryption-errors number</a>
<b>Tree</b>	<a href="#">usm-stats-decryption-errors</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**usm-stats-not-in-time-windows** *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because they appeared outside of the authoritative SNMP engine's window.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics usm-stats-not-in-time-windows</a> <i>number</i>
<b>Tree</b>	<a href="#">usm-stats-not-in-time-windows</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**usm-stats-unknown-engine-ids** *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because they referenced an snmpEngineID that was not known to the SNMP engine.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics usm-stats-unknown-engine-ids</a> <i>number</i>
<b>Tree</b>	<a href="#">usm-stats-unknown-engine-ids</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**usm-stats-unknown-user-names** *number*

<b>Description</b>	The total number of packets received by the SNMP engine which were dropped because they referenced a user that was not known to the SNMP engine.
<b>Context</b>	<a href="#">system snmp network-instance name</a> <i>reference</i> <a href="#">statistics usm-stats-unknown-user-names</a> <i>number</i>
<b>Tree</b>	<a href="#">usm-stats-unknown-user-names</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **usm-stats-unsupported-sec-levels** *number*

**Description** The total number of packets received by the SNMP engine which were dropped because they requested a securityLevel that was unknown to the SNMP engine or otherwise unavailable.

**Context** [system snmp network-instance name](#) *reference* [statistics usm-stats-unsupported-sec-levels](#) *number*

**Tree** [usm-stats-unsupported-sec-levels](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **usm-stats-wrong-digests** *number*

**Description** The total number of packets received by the SNMP engine which were dropped because they didn't contain the expected digest value.

**Context** [system snmp network-instance name](#) *reference* [statistics usm-stats-wrong-digests](#) *number*

**Tree** [usm-stats-wrong-digests](#)

**Default** 0

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **transport** *keyword*

**Description** Transport to be used for SNMP requests

**Context** [system snmp network-instance name](#) *reference* [transport](#) *keyword*

**Tree** [transport](#)

**Default** udp

<b>Options</b>	<ul style="list-style-type: none"> <li>• udp</li> <li>• tcp</li> <li>• both</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trap-group *name string*

<b>Description</b>	List of configured SNMP trap-groups
<b>Context</b>	<a href="#">system snmp trap-group name string</a>
<b>Tree</b>	<a href="#">trap-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	Name of the SNMP trap-group
<b>Context</b>	<a href="#">system snmp trap-group name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Enables the SNMP traps in the network-instance
<b>Context</b>	<a href="#">system snmp trap-group name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> </ul>

- disable

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	Description for this trap-group
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### destination *name string*

<b>Description</b>	List of configured SNMPv3 trap-destinations
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	16

### name *string*

<b>Description</b>	Name of the SNMPv3 destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Destination IP addresses for the SNMP trap
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state** *keyword*

<b>Description</b>	Enables the SNMP traps to this destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	enable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **community-entry** [name](#) *string*

<b>Description</b>	SNMPv2 community configured on this destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">community-entry</a> <a href="#">name</a> <i>string</i>
<b>Tree</b>	<a href="#">community-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



	7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1
<b>name <i>string</i></b>	
<b>Description</b>	Unique name for the SNMP community on this destination.
<b>Context</b>	<a href="#">system snmp trap-group name string destination name string community-entry name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>community <i>string</i></b>	
<b>Description</b>	SNMPv2 community
<b>Context</b>	<a href="#">system snmp trap-group name string destination name string community-entry name string community string</a>
<b>Tree</b>	<a href="#">community</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>description <i>string</i></b>	
<b>Description</b>	Description for the SNMPv2 community
<b>Context</b>	<a href="#">system snmp trap-group name string destination name string community-entry name string description string</a>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### description *string*

<b>Description</b>	Description for this destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">description</a> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port *number*

<b>Description</b>	Destination port for the SNMP trap
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">port number</a>
<b>Tree</b>	<a href="#">port</a>
<b>Range</b>	0 to 65535
<b>Default</b>	162
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### security-entry *name string*

<b>Description</b>	SNMPv3 security configured on this destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i>
<b>Tree</b>	<a href="#">security-entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

	7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	1
<b>name <i>string</i></b>	
<b>Description</b>	Unique name of the SNMPv3 security.
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>authentication</b>	
<b>Description</b>	Authentication parameters for this user.
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>password <i>string</i></b>	
<b>Description</b>	The user authentication password, supplied either as cleartext or as a hashed value.  If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">authentication password</a> <i>string</i>
<b>Tree</b>	<a href="#">password</a>
<b>String Length</b>	8 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **protocol** *keyword*

<b>Description</b>	Authentication protocol used by this user.
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <b>authentication protocol</b> <i>keyword</i>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	hmac-md5-96
<b>Options</b>	<ul style="list-style-type: none"> <li>• hmac-md5-96 MD5</li> <li>• hmac-sha1-96 SHA</li> <li>• hmac-sha2-224 SHA-224</li> <li>• hmac-sha2-256 SHA-256</li> <li>• hmac-sha2-384 SHA-384</li> <li>• hmac-sha2-512 SHA-512</li> </ul>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **description** *string*

<b>Description</b>	Description for this user
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <b>description</b> <i>string</i>
<b>Tree</b>	<a href="#">description</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### engine-id *string*

<b>Description</b>	The unique identifier for the SNMP engine of a trap sender. If this leaf is not set, the local SNMP engine will be used, this needs to be configured on the destination side too
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">engine-id</a> <i>string</i>
<b>Tree</b>	<a href="#">engine-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### privacy

<b>Description</b>	Privacy parameters for this user.
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy</a>
<b>Tree</b>	<a href="#">privacy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### password *string*

<b>Description</b>	The user privacy password, supplied either as cleartext or as a hashed value. If not provided, authentication/password will be used. If provided as cleartext, the system will hash the value on input, storing only the hashed value. If provided as a hashed value, the value should include any '\$' characters, for example '\$ar2\$aOvsuj0ALIU=\$r750fMa3ZEA/Di8dIfU2fQ=='
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<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy password</a> <i>string</i>
<b>Tree</b>	<a href="#">password</a>
<b>String Length</b>	8 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**protocol** *keyword*

<b>Description</b>	Privacy protocol used by this user.
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">privacy protocol</a> <i>keyword</i>
<b>Tree</b>	<a href="#">protocol</a>
<b>Default</b>	cbc-des
<b>Options</b>	<ul style="list-style-type: none"> <li>• cbc-des DES</li> <li>• cfb128-aes-128 AES</li> <li>• cfb128-aes-192 AES-192</li> <li>• cfb128-aes-256 AES-256</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**user** *string*

<b>Description</b>	User name used in SNMPv3 authentication and privacy
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-entry name</a> <i>string</i> <a href="#">user</a> <i>string</i>
<b>Tree</b>	<a href="#">user</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### security-level *keyword*

<b>Description</b>	Security level required for this destination
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">destination name</a> <i>string</i> <a href="#">security-level keyword</a>
<b>Tree</b>	<a href="#">security-level</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-auth-no-priv</li> <li>• auth-no-priv</li> <li>• auth-priv</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance *reference*

<b>Description</b>	Reference to a network-instance configured for SNMP
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">system snmp network-instance name</a> <i>reference</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-address (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address for the SNMP server to use as source-address within the network-instance
<b>Context</b>	<a href="#">system snmp trap-group name</a> <i>string</i> <a href="#">source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )

<b>Tree</b>	<a href="#">source-address</a>
<b>Default</b>	::
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ssh-server** [name string](#)

<b>Description</b>	Enter the ssh-server list instance
<b>Context</b>	<a href="#">system ssh-server name string</a>
<b>Tree</b>	<a href="#">ssh-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **name** *string*

<b>Description</b>	User-provided name of this server instance
<b>Context</b>	<a href="#">system ssh-server name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **admin-state** *keyword*

<b>Description</b>	Enable or disable the SSH server instance
<b>Context</b>	<a href="#">system ssh-server name string admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**allowed-authentication-types** *keyword*

<b>Description</b>	List of allowed authentication types  This sets the AuthenticationMethods option within each SSH servers configuration file. Also sets PasswordAuthentication PubkeyAuthentication KbdInteractiveAuthentication options within each SSH servers configuration file.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">allowed-authentication-types</a> <i>keyword</i>
<b>Tree</b>	<a href="#">allowed-authentication-types</a>
<b>Default</b>	publickey
<b>Options</b>	<ul style="list-style-type: none"> <li>• password</li> <li>• publickey</li> <li>• keyboard-interactive</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**authorized-principal-check-tool** *keyword*

<b>Description</b>	Configure the tool used to check the authorized principals  Setting the value to hiba-chk sets the AuthorizedPrincipalsCommand to hiba-chk tool. If unset, the aaamgr will do the principal checking.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">authorized-principal-check-tool</a> <i>keyword</i>
<b>Tree</b>	<a href="#">authorized-principal-check-tool</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• hiba-chk</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**counters**

<b>Description</b>	A collection of counters that were collected by the SSH server during the SSH authentication process.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">counters</a>
<b>Tree</b>	<a href="#">counters</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-accepts** *number*

<b>Description</b>	The total number of times the SSH allowed access to the server.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">counters access-accepts</a> <i>number</i>
<b>Tree</b>	<a href="#">access-accepts</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **access-rejects** *number*

<b>Description</b>	The total number of times the SSH server denied access to the server.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">counters access-rejects</a> <i>number</i>
<b>Tree</b>	<a href="#">access-rejects</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-access-accept** *string*

<b>Description</b>	A timestamp of the last time the SSH allowed access to the server.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">counters last-access-accept</a> <i>string</i>
<b>Tree</b>	<a href="#">last-access-accept</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## last-access-reject *string*

<b>Description</b>	A timestamp of the last time the SSH server denied access to the server.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">counters last-access-reject</a> <i>string</i>
<b>Tree</b>	<a href="#">last-access-reject</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## credentialz

<b>Description</b>	Information relating to the active host keys and certificates as provided via Credentialz  State is provided by the gNSI Credentialz service, and can be changed using the gNSI.Credentialz.RotateHostParameters RPC
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">credentialz</a>
<b>Tree</b>	<a href="#">credentialz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## host-certificate

<b>Description</b>	State relating to the Host Certificates provided via Credentialz
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">credentialz host-certificate</a>
<b>Tree</b>	<a href="#">host-certificate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name string credentialz host-certificate created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name string credentialz host-certificate version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**host-key**

<b>Description</b>	State relating to the Host Keys provided via Credentialz
<b>Context</b>	<a href="#">system ssh-server name string credentialz host-key</a>
<b>Tree</b>	<a href="#">host-key</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on string**

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name string credentialz host-key created-on string</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name string credentialz host-key version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trusted-user-ca-keys**

<b>Description</b>	State relating to the Certificate Authorities provided via Credentialz.
<b>Context</b>	<a href="#">system ssh-server name string credentialz trusted-user-ca-keys</a>
<b>Tree</b>	<a href="#">trusted-user-ca-keys</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on** *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the artifact  The maps to the created_on field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">credentialz trusted-user-ca-keys</a> <a href="#">created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version** *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the artifact  The maps to the version field within a Entity message in the Credentialz protobuf.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">credentialz trusted-user-ca-keys</a> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**disable-shell** *boolean*

<b>Description</b>	Disable the ability to spawn a shell for incoming connections
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">disable-shell</a> <i>boolean</i>
<b>Tree</b>	<a href="#">disable-shell</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**host-key**

<b>Description</b>	Enter the host-key context
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">host-key</a>
<b>Tree</b>	<a href="#">host-key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**preserve** *boolean*

<b>Description</b>	<p>Indicates whether the autogenerated SSH server host keys should be preserved on reboots</p> <p>Setting this to true will result in host keys in /etc/sshd not being cleared on a reboot. Alternatively setting this to false will result in host keys being removed and regenerated on each reboot of the system.</p> <p>This is useful only when the host keys are not statically configured and not dynamically configured using gNSI Credentialz service (and therefore are suitable to be potentially regenerated on every reboot).</p> <p>Takes effect only if the value is set to false for every configured ssh server instance.</p>
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">host-key</a> <a href="#">preserve</a> <i>boolean</i>
<b>Tree</b>	<a href="#">preserve</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *type keyword*

<b>Description</b>	List of the SSH servers host private-keys and certificates
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">host-key</a> <a href="#">type</a> <i>type</i> <a href="#">keyword</a>
<b>Tree</b>	<a href="#">type</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Type of generated host key
--------------------	----------------------------

**Context** [system ssh-server name string host-key type type keyword](#)

- Options**
- ssh-rsa-3076
  - ecdsa-sha2-nistp256
  - ecdsa-sha2-nistp521
  - ssh-ed25519
  - ssh-rsa-2048
  - ssh-rsa-4096

**Configurable** True

**Platforms** Supported on all platforms

### **certificate string**

**Description** Each item value should be the host key certificate as read from the \*-cert.pub file generated by the CA including the certificate type, e.g. 'ssh-rsa-cert-v01@openssh.com AAAA<...> comment'.  
This certificate is returned to clients during SSH init for the client to verify the host it is communicating with.  
This sets the HostCertificate option within each SSH servers configuration file. The certificate should be generated by first extracting the systems current public key and having this signed by a CA.

**Context** [system ssh-server name string host-key type type keyword certificate string](#)

**Tree** [certificate](#)

**Configurable** True

**Platforms** Supported on all platforms

### **private-key string**

**Description** The value should be the host private key as read from the private key file.  
This sets the HostKey option within each SSH servers configuration file.

**Context** [system ssh-server name string host-key type type keyword private-key string](#)

**Tree** [private-key](#)

**Configurable** True

**Platforms** Supported on all platforms

### **public-key string**

**Description** The value is be the host public key as read from the public key file.



<b>Context</b>	<a href="#">system ssh-server name string host-key type type keyword public-key string</a>
<b>Tree</b>	<a href="#">public-key</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### **network-instance** *reference*

<b>Description</b>	Network instance to run the SSH server in
<b>Context</b>	<a href="#">system ssh-server name string network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **oper-state** *keyword*

<b>Description</b>	Operational state of the SSH server instance
<b>Context</b>	<a href="#">system ssh-server name string oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading</li> </ul>

Component is currently being upgraded

- low-power

Component is offline due to insufficient system power

- degraded

Component or process is in a degraded state

- warm-reboot

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

Supported on all platforms

### **port number**

**Description**

Port the SSH server instance will listen on for incoming connections

**Context**

[system ssh-server name](#) *string* [port number](#)

**Tree**

[port](#)

**Range**

0 to 65535

**Default**

22

**Configurable**

True

**Platforms**

Supported on all platforms

### **protocol-version number**

**Description**

Protocol version in use by the SSH server

**Context**

[system ssh-server name](#) *string* [protocol-version number](#)

**Tree**

[protocol-version](#)

**Configurable**

False

**Platforms**

Supported on all platforms

**rate-limit** *number*

<b>Description</b>	Set a limit on the number of unauthenticated sessions to the SSH server after this number is met, the server will start dropping connection attempts
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">rate-limit</a> <i>number</i>
<b>Tree</b>	<a href="#">rate-limit</a>
<b>Default</b>	20
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**revoked-keys** *string*

<b>Description</b>	List of revoked public keys  Each items value should be the public key of a revoked keypair, e.g. 'ssh-rsa AAAA<...>= comment'. Any keys provided here cannot be used for public key authentication.  This sets the RevokedKeys option within each SSH servers configuration file.
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">revoked-keys</a> <i>string</i>
<b>Tree</b>	<a href="#">revoked-keys</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**source-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	List of IP addresses for the SSH server to listen on within the network-instance
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">source-address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**timeout** *number*

<b>Description</b>	Set the idle timeout in seconds on SSH connections
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>

<b>Default</b>	0
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **trust-anchors** *string*

<b>Description</b>	<p>List of public keys used to verify user certificates during authentication</p> <p>Each items value should be the public key of a CA, e.g. 'ssh-rsa AAAA&lt;...&gt;=comment'. If no trust anchors are configured, authentication using SSH certificates will not function.</p> <p>This sets the TrustedUserCAKeys option within each SSH servers configuration file.</p>
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">trust-anchors</a> <i>string</i>
<b>Tree</b>	<a href="#">trust-anchors</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **use-credentialz** *boolean*

<b>Description</b>	<p>Use the gNSI Credentialz service global SSH configuration for this SSH server instance</p> <p>Setting this to true will apply any gNSI Credentialz configuration for this SSH server instance. Static configuration will override any gNSI Credentialz configuration.</p>
<b>Context</b>	<a href="#">system ssh-server name</a> <i>string</i> <a href="#">use-credentialz</a> <i>boolean</i>
<b>Tree</b>	<a href="#">use-credentialz</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **sync**

<b>Description</b>	Context to configure sync parameters and report sessions state
<b>Context</b>	<a href="#">system sync</a>
<b>Tree</b>	<a href="#">sync</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## freq-clock

**Description** Enter the freq-clock context

**Context** [system sync freq-clock](#)

**Tree** [freq-clock](#)

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## active-reference *keyword*

**Description** Indicates the current selected reference  
This will be an instance-number; or internal for the case of holdover or freerun.

**Context** [system sync freq-clock active-reference keyword](#)

**Tree** [active-reference](#)

**Options**

- 1
- 2
- 3
- 4
- 5
- internal

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## freq-clock-state *keyword*

**Description** Shows the frequency clock mode state

**Context** [system sync freq-clock freq-clock-state keyword](#)

**Tree** [freq-clock-state](#)

**Options**

- not-present  
Frequency clock is locked to a line timing reference signal
- master-free-run

- Frequency clock is master free run mode
- master-holdover
  - Frequency clock is master holdover mode
- master-locked
  - Frequency clock is master locked mode
- slave
  - Frequency clock is slave mode
- acquiring
  - Frequency clock is acquiring mode

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **freq-offset** *decimal-number*

<b>Description</b>	The frequency offset between the central frequency clock and the selected reference in ppb
<b>Context</b>	<a href="#">system sync freq-clock freq-offset</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">freq-offset</a>
<b>Units</b>	parts-per-billion
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **network-type** *keyword*

<b>Description</b>	Configures SyncE for SSM code-type as SONET or SDH mode <code>sdh</code> specifies the values corresponding to ITU-T G.781 Option 1 compliant networks. <code>sonet</code> specifies the values corresponding to ITU-T G.781 Option 2 compliant networks.
<b>Context</b>	<a href="#">system sync freq-clock network-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">network-type</a>
<b>Default</b>	sonet
<b>Options</b>	<ul style="list-style-type: none"> <li>• <code>sdh</code> <ul style="list-style-type: none"> <li><code>sdh</code> specifies the values corresponding to G.781 Option 1 compliant networks</li> </ul> </li> <li>• <code>sonet</code></li> </ul>

sonet specifies the values corresponding to G.781 Option 2 compliant networks

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ql-input-threshold** *keyword*

<b>Description</b>	This command configures the minimum acceptable QL value Frequency references with lower QL will not be considered for selection by the system timing module. Options: unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
<b>Context</b>	<a href="#">system sync freq-clock ql-input-threshold</a> <i>keyword</i>
<b>Tree</b>	<a href="#">ql-input-threshold</a>
<b>Default</b>	unused
<b>Options</b>	<ul style="list-style-type: none"> <li>• unused No override or minimum QL level selected</li> <li>• prs QL of PRS</li> <li>• stu QL of STU</li> <li>• st2 QL of Stratum 2</li> <li>• tnc QL of TNC</li> <li>• st3e QL of Stratum 3E</li> <li>• st3 QL of Stratum 3</li> <li>• prc QL of PRC</li> <li>• ssua QL of SSU-A</li> <li>• ssub QL of SSU-B</li> <li>• sec QL of SEC</li> </ul>

	<ul style="list-style-type: none"> <li>• eec1 QL of EEC-1</li> <li>• eec2 QL of EEC-2</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ql-selection *boolean*

<b>Description</b>	Configures if frequency reference selection takes the QL (Quality Level) into account. When enabled, the selection of system timing reference and BITS output timing reference takes into account quality level. Quality level is conveyed via the SSM or forced using the ql-override command..
<b>Context</b>	<a href="#">system sync freq-clock ql-selection</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ql-selection</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### revert *boolean*

<b>Description</b>	This command configures if the frequency clock is in revertive mode. In revertive mode, when a failed reference becomes operational, the system will automatically switch to the recovered reference if it is of higher priority and/or QL. When the mode is non-revertive, a failed clock source is not automatically selected.
<b>Context</b>	<a href="#">system sync freq-clock revert</a> <i>boolean</i>
<b>Tree</b>	<a href="#">revert</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### system-ql-value *keyword*

<b>Description</b>	System QL value based on the reference selected
<b>Context</b>	<a href="#">system sync freq-clock system-ql-value</a> <i>keyword</i>



**Tree****Options****system-ql-value**

- unknown  
Unknown
- prs  
QL of PRS
- stu  
QL of STU
- st2  
QL of Stratum 2
- tnc  
QL of TNC
- st3e  
QL of Stratum 3E
- st3  
QL of Stratum 3
- smc  
QL of SMC
- st4  
QL of Stratum 4
- dus  
QL of DNU
- prc  
QL of PRC
- ssua  
QL of SSU-A
- ssub  
QL of SSU-B
- sec  
QL of SEC
- dnu  
QL of DNU
- inv  
QL of INV
- pno  
QL of PNO
- eec1

	QL of EEC-1 • eec2 QL of EEC-2 • failed Failed
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **wait-to-restore** *number*

<b>Description</b>	This command configures the time for the Wait to Restore timer. A previously failed input reference must be valid for the time specified before it is used for the clock input reference.
<b>Context</b>	<a href="#">system sync freq-clock wait-to-restore</a> <i>number</i>
<b>Tree</b>	<a href="#">wait-to-restore</a>
<b>Range</b>	0 to 12
<b>Default</b>	5
<b>Units</b>	minutes
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **freq-references**

<b>Description</b>	Enter the freq-references context
<b>Context</b>	<a href="#">system sync freq-references</a>
<b>Tree</b>	<a href="#">freq-references</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **instance** [instance-number](#) *number*

<b>Description</b>	List of line references configured for frequency
<b>Context</b>	<a href="#">system sync freq-references instance instance-number</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### instance-number *number*

<b>Description</b>	The instance number of the each line reference
<b>Context</b>	<a href="#">system sync freq-references instance instance-number number</a>
<b>Range</b>	1 to 5
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

<b>Description</b>	Configure the administrative state of this frequency reference instance
<b>Context</b>	<a href="#">system sync freq-references instance instance-number number admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### not-qualified-reason *keyword*

<b>Description</b>	If the reference is not qualified, this identifies the reason
<b>Context</b>	<a href="#">system sync freq-references instance instance-number number not-qualified-reason keyword</a>
<b>Tree</b>	<a href="#">not-qualified-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• not-applicable Reason is not applicable</li> <li>• los Reference is not-qualified because of Loss of Signal (LOS)</li> <li>• ssm-quality</li> </ul>

- Reference is not-qualified because of received SSM/QL level
- out-of-range  
Reference is not-qualified because the reference is out of range in frequency
- wtr  
Reference is not-qualified because the wait-to-restore timer has not expired
- admin-disabled  
Reference is not-qualified because the reference has not been admin enabled

**Configurable**

False

**Platforms**

7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**oper-state** *keyword***Description**

Indicates the operational state of this line reference

**Context**[system sync freq-references instance instance-number number oper-state keyword](#)**Tree**[oper-state](#)**Options**

- up  
Component or process is operational
- down  
Component or process is not operational
- empty  
Component slot is empty
- downloading  
Component is downloading image into memory
- booting  
Component is booting downloaded image
- starting  
Component image operational, application processes starting
- failed  
Component or process has failed
- synchronizing  
Component is currently being synchronized
- upgrading

Component is currently being upgraded

- low-power

Component is offline due to insufficient system power

- degraded

Component or process is in a degraded state

- warm-reboot

Component or process is currently warm rebooting

This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.

- waiting

Component or process is currently waiting

This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

**Configurable**

False

**Platforms**

7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **priority number**

**Description**

Sets the priority of this line timing reference for the system timing selection process 1 = highest priority 5 = lowest priority Duplicate numbers are not allowed

**Context**

[system sync freq-references instance instance-number number priority number](#)

**Tree**

[priority](#)

**Range**

1 to 5

**Default**

3

**Configurable**

True

**Platforms**

7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **ql-override keyword**

**Description**

Override the incoming QL/SSM value for this line reference Quality level override of a timing reference Options are unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2

---

<b>Context</b>	<a href="#">system sync freq-references instance instance-number</a> <i>number ql-override</i> <i>keyword</i>
<b>Tree</b>	<a href="#">ql-override</a>
<b>Default</b>	unused
<b>Options</b>	<ul style="list-style-type: none"> <li>• unused No override or minimum QL level selected</li> <li>• prs QL of PRS</li> <li>• stu QL of STU</li> <li>• st2 QL of Stratum 2</li> <li>• tnc QL of TNC</li> <li>• st3e QL of Stratum 3E</li> <li>• st3 QL of Stratum 3</li> <li>• prc QL of PRC</li> <li>• ssua QL of SSU-A</li> <li>• ssub QL of SSU-B</li> <li>• sec QL of SEC</li> <li>• eec1 QL of EEC-1</li> <li>• eec2 QL of EEC-2</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ql-value** *keyword*

<b>Description</b>	The incoming QL/SSM value from this line reference
<b>Context</b>	<a href="#">system sync freq-references instance instance-number</a> <i>number ql-value keyword</i>
<b>Tree</b>	<a href="#">ql-value</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• unknown Unknown</li><li>• prs QL of PRS</li><li>• stu QL of STU</li><li>• st2 QL of Stratum 2</li><li>• tnc QL of TNC</li><li>• st3e QL of Stratum 3E</li><li>• st3 QL of Stratum 3</li><li>• smc QL of SMC</li><li>• st4 QL of Stratum 4</li><li>• dus QL of DNU</li><li>• prc QL of PRC</li><li>• ssua QL of SSU-A</li><li>• ssub QL of SSU-B</li><li>• sec QL of SEC</li><li>• dnu QL of DNU</li></ul>

- inv  
QL of INV
- pno  
QL of PNO
- eec1  
QL of EEC-1
- eec2  
QL of EEC-2
- failed  
Failed

**Configurable**

False

**Platforms**

7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reference-status** *keyword***Description**

The current status this line reference

**Context**[system sync freq-references instance instance-number number reference-status keyword](#)**Tree**[reference-status](#)**Options**

- qualified  
Reference is in normal qualified state
- not-qualified  
Reference is in not-qualified state

**Configurable**

False

**Platforms**

7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source****Description**

Source for this input frequency reference

This shall be either a leafref to an interface or an application. The leafref must point to an existing physical ethernet interface.

**Context**[system sync freq-references instance instance-number number source](#)**Tree**[source](#)**Configurable**

True



**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## gnss

**Description** Enable the gnss context

**Context** [system sync freq-references instance instance-number number source gnss](#)

**Tree** [gnss](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface *reference*

**Description** Enter the interface context

**Context** [system sync freq-references instance instance-number number source interface reference](#)

**Tree** [interface](#)

**Reference** [interface name string](#)

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sync0

**Description** Enable the sync0 context

**Context** [system sync freq-references instance instance-number number source sync0](#)

**Tree** [sync0](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## gnss

**Description** Enter the gnss context

**Context** [system sync gnss](#)

**Tree** [gnss](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## constellation

**Description** Selects which constellations to be used for GNSS  
**Context** [system sync gnss constellation](#)  
**Tree** [constellation](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## galileo *boolean*

**Description** Enter the galileo context  
**Context** [system sync gnss constellation galileo boolean](#)  
**Tree** [galileo](#)  
**Default** false  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## gps *boolean*

**Description** Enter the gps context  
**Context** [system sync gnss constellation gps boolean](#)  
**Tree** [gps](#)  
**Default** true  
**Configurable** False  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## receiver [gnss-id](#) *keyword*

**Description** Specific configuration and states of a specific receiver  
**Context** [system sync gnss receiver gnss-id keyword](#)  
**Tree** [receiver](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gnss-id** *keyword*

<b>Description</b>	Enter the gnss-id context
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>gnss-a This may be the sole GNSS receiver or GNSS-A receiver in routers with redundant CPMs</li> <li>gnss-b Specific configuration and states of GNSS-B receiver in routers with redundant CPMs</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configure the administrative state of the GNSS port
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**altitude-position** *decimal-number*

<b>Description</b>	Specifies the current altitude of the GNSS antenna
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword altitude-position decimal-number</a>
<b>Tree</b>	<a href="#">altitude-position</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**antenna-cable-delay** *number*

<b>Description</b>	Sets the cable delay value (integer) in ns to the GNSS antenna
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword antenna-cable-delay number</a>

<b>Tree</b>	<a href="#">antenna-cable-delay</a>
<b>Range</b>	0 to 1000
<b>Default</b>	0
<b>Units</b>	nanoseconds
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **elevation-mask-angle** *number*

<b>Description</b>	Sets the elevation mask angle This provides a method of filtering satellites low on the horizon to be used by the system.
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword elevation-mask-angle number</a>
<b>Tree</b>	<a href="#">elevation-mask-angle</a>
<b>Range</b>	0 to 89
<b>Default</b>	10
<b>Units</b>	degrees
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-antenna-status** *keyword*

<b>Description</b>	Specifies the current state of the GNSS antenna
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword gnss-antenna-status keyword</a>
<b>Tree</b>	<a href="#">gnss-antenna-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• unknown GNSS antenna is unknown</li> <li>• unsupported GNSS antenna is not supported</li> <li>• ok GNSS antenna is working as expected</li> <li>• over-current GNSS antenna is over-current</li> <li>• under-current GNSS antenna is under-current</li> <li>• no-bias-voltage</li> </ul>

GNSS antenna has no bias voltage

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-date-and-time** *string*

<b>Description</b>	Specifies the date and time as recovered from GNSS
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> <i>keyword</i> <a href="#">gnss-date-and-time</a> <i>string</i>
<b>Tree</b>	<a href="#">gnss-date-and-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-firmware** *string*

<b>Description</b>	Specifies the current firmware used by the GNSS receiver
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> <i>keyword</i> <a href="#">gnss-firmware</a> <i>string</i>
<b>Tree</b>	<a href="#">gnss-firmware</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-receiver-status** *string*

<b>Description</b>	Specifies the current state of the GNSS receiver module
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> <i>keyword</i> <a href="#">gnss-receiver-status</a> <i>string</i>
<b>Tree</b>	<a href="#">gnss-receiver-status</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-sync-status** *keyword*

<b>Description</b>	Specifies the current state of the sync recovery from GNSS
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> <i>keyword</i> <a href="#">gnss-sync-status</a> <i>keyword</i>
<b>Tree</b>	<a href="#">gnss-sync-status</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>unknown GNSS sync status is unknown</li> </ul>

	<ul style="list-style-type: none"> <li>locked GNSS sync status is locked</li> <li>not-locked GNSS sync status is unlocked</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-utc-offset** *number*

<b>Description</b>	Specifies the UTC as recovered from GNSS
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">gnss-utc-offset</a> <i>number</i>
<b>Tree</b>	<a href="#">gnss-utc-offset</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **gnss-utc-offset-valid** *boolean*

<b>Description</b>	Specifies the UTC offset is valid as recovered from GNSS
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">gnss-utc-offset-valid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">gnss-utc-offset-valid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **latitude-position** *decimal-number*

<b>Description</b>	Specifies the current latitude of the GNSS antenna
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">latitude-position</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">latitude-position</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **longitude-position** *decimal-number*

<b>Description</b>	Specifies the current longitude of the GNSS antenna
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">longitude-position</a> <i>decimal-number</i>

<b>Tree</b>	<a href="#">longitude-position</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **number-of-satellites-visible** *number*

<b>Description</b>	The number of satellites currently visible
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword number-of-satellites-visible number</a>
<b>Tree</b>	<a href="#">number-of-satellites-visible</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **oper-state** *keyword*

<b>Description</b>	Operational state of the GNSS port
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• up Component or process is operational</li> <li>• down Component or process is not operational</li> <li>• empty Component slot is empty</li> <li>• downloading Component is downloading image into memory</li> <li>• booting Component is booting downloaded image</li> <li>• starting Component image operational, application processes starting</li> <li>• failed Component or process has failed</li> <li>• synchronizing Component is currently being synchronized</li> <li>• upgrading Component is currently being upgraded</li> </ul>

- low-power  
Component is offline due to insufficient system power
- degraded  
Component or process is in a degraded state
- warm-reboot  
Component or process is currently warm rebooting  
This state is set during a warm reboot immediately following initiation of the reboot, continuing after startup until the system has completed audit. In this state the system will not accept configuration changes.
- waiting  
Component or process is currently waiting  
This state can be set by event handler when the reinvoke-with-delay action is used, and indicates that the event handler is waiting for the provided delay before reinvoking the instance.

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **position-valid** *boolean*

<b>Description</b>	Specifies if the current position information is valid
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">position-valid</a> <i>boolean</i>
<b>Tree</b>	<a href="#">position-valid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **satellites-in-use**

<b>Description</b>	The list of satellites currently in use
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id</a> keyword <a href="#">satellites-in-use</a>
<b>Tree</b>	<a href="#">satellites-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **instance** [instance-number](#) *number*

<b>Description</b>	Enter the instance list instance
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<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number</a>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-number** *number*

<b>Description</b>	Information regarding each SV (Space Vehicle)
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**band** *string*

<b>Description</b>	SV's band
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number band string</a>
<b>Tree</b>	<a href="#">band</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**constellation** *string*

<b>Description</b>	Constellation of the SV (Space Vehicle)
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number constellation string</a>
<b>Tree</b>	<a href="#">constellation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**prn** *number*

<b>Description</b>	Pseudo Random Number (PRN) of the Space Vehicle This represents the satellite's unique pseudorandom noise code
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<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number prn number</a>
<b>Tree</b>	<a href="#">prn</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**signal-strength** *number*

<b>Description</b>	Carrier to noise ratio in dB-Hz
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use instance instance-number number signal-strength number</a>
<b>Tree</b>	<a href="#">signal-strength</a>
<b>Units</b>	dB-Hz
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**number-of-satellites-in-use** *number*

<b>Description</b>	The number of satellites currently in use
<b>Context</b>	<a href="#">system sync gnss receiver gnss-id keyword satellites-in-use number-of-satellites-in-use number</a>
<b>Tree</b>	<a href="#">number-of-satellites-in-use</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**one-pps**

<b>Description</b>	Enter the one-pps context
<b>Context</b>	<a href="#">system sync one-pps</a>
<b>Tree</b>	<a href="#">one-pps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**admin-state** *keyword*

<b>Description</b>	Configure the administrative state of the 1PPS (50 ohm) output port When enabled, output is enabled. Otherwise, the output is disabled.
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<b>Context</b>	<a href="#">system sync one-pps admin-state</a> <i>keyword</i>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ptp

<b>Description</b>	Enter the ptp context
<b>Context</b>	<a href="#">system sync ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instance [instance-index](#) *number*

<b>Description</b>	<p>List of one or more PTP instances in the product (PTP Node)</p> <p>Each PTP instance represents a distinct instance of PTP implementation (i.e. distinct Ordinary Clock, Boundary Clock, or Transparent Clock), maintaining a distinct time.</p>
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## instance-index *number*

<b>Description</b>	<p>The instance index of the current PTP instance</p> <p>This instance index is used for management purposes only. This instance index does not represent the PTP domain number and is not used in PTP messages.</p>
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i>
<b>Range</b>	1 to 2

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-ds**

<b>Description</b>	Provides current data from operation of the protocol
<b>Context</b>	<a href="#">system sync ptp instance instance-index number current-ds</a>
<b>Tree</b>	<a href="#">current-ds</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mean-delay *number***

<b>Description</b>	The mean propagation time between this PTP instance and the master clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number current-ds mean-delay number</a>
<b>Tree</b>	<a href="#">mean-delay</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**offset-from-master *number***

<b>Description</b>	The time difference between this PTP instance and the master clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number current-ds offset-from-master number</a>
<b>Tree</b>	<a href="#">offset-from-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**steps-removed *number***

<b>Description</b>	The number of PTP clock steps in the path between the this PTP instance and the GM
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number current-ds steps-removed number</a>
<b>Tree</b>	<a href="#">steps-removed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## default-ds

<b>Description</b>	The default data set of the PTP instance In the context of the protocol, this data set is required for an Ordinary Clock or Boundary Clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds</a>
<b>Tree</b>	<a href="#">default-ds</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## announce-receipt-timeout *number*

<b>Description</b>	Sets the time limit for missed Announce packets before the master clock is deemed down  This command configures the announceReceiptTimeout value for all peer associations. This defines the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds announce-receipt-timeout number</a>
<b>Tree</b>	<a href="#">announce-receipt-timeout</a>
<b>Range</b>	2 to 10
<b>Default</b>	3
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clock-identity *binary*

<b>Description</b>	The clockIdentity of the local clock
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds clock-identity binary</a>
<b>Tree</b>	<a href="#">clock-identity</a>
<b>String Length</b>	8
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-quality

<b>Description</b>	The clockQuality of the local clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds clock-quality</a>
<b>Tree</b>	<a href="#">clock-quality</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-accuracy *number*

<b>Description</b>	The clockAccuracy indicates the expected accuracy of the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds clock-quality clock-accuracy number</a>
<b>Tree</b>	<a href="#">clock-accuracy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-class *number*

<b>Description</b>	The clockClass denotes the traceability of the time or frequency distributed by the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds clock-quality clock-class number</a>
<b>Tree</b>	<a href="#">clock-class</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**offset-scaled-log-variance** *number*

<b>Description</b>	The offsetScaledLogVariance provides an estimate of the variations of the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds clock-quality offset-scaled-log-variance number</a>
<b>Tree</b>	<a href="#">offset-scaled-log-variance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-time**

<b>Description</b>	The current time in the current data set
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds current-time</a>
<b>Tree</b>	<a href="#">current-time</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**date-time** *string*

<b>Description</b>	PTP current time converted to UTC and presented as a date-time string
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds current-time date-time string</a>
<b>Tree</b>	<a href="#">date-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-nano-seconds** *number*

<b>Description</b>	Nano-seconds of time
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds current-time time-nano-seconds number</a>
<b>Tree</b>	<a href="#">time-nano-seconds</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-seconds** *number*

**Description** Seconds of time

**Context** [system sync ptp instance instance-index number default-ds current-time time-seconds number](#)

**Tree** [time-seconds](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **domain-number** *number*

**Description** The IEEE Std 1588 domainNumber of the PTP instance

A domain consists of one or more PTP instances communicating with each other as defined by the protocol. A domain shall define the scope of PTP message communication, state, operations, data sets, and timescale. Therefore, each domain represents a distinct time. The default domain number is defined by the profile. itug8275dot1: 24 itug8275dot2: 44

**Context** [system sync ptp instance instance-index number default-ds domain-number number](#)

**Tree** [domain-number](#)

**Range** 0 to 255

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **instance-enable** *boolean*

**Description** Enable PTP clock

**Context** [system sync ptp instance instance-index number default-ds instance-enable boolean](#)

**Tree** [instance-enable](#)

**Default** false

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**instance-type** *keyword*

<b>Description</b>	The type of PTP instance as per IEEE1588 standard For G.8275.1: oc is for T-GM, bc is for T-BC; T-TSC not supported since T-BC can be used for this role For G.8275.2: oc is for T-GM, bc is for T-BC-A and T-BC-P; T-TSC-A and T-TSC-P are not supported since T-BC-A or T-BC-P can be used for this role
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds instance-type keyword</a>
<b>Tree</b>	<a href="#">instance-type</a>
<b>Default</b>	bc
<b>Options</b>	<ul style="list-style-type: none"> <li>bc boundary clock</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**local-priority** *number*

<b>Description</b>	The IEEE Std 1588 priority2 of the PTP instance The priority2 member is compared by the Best Master Clock Algorithm (BMCA) after priority1 and clockQuality. Lower values take precedence.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds local-priority number</a>
<b>Tree</b>	<a href="#">local-priority</a>
<b>Range</b>	1 to 255
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-announce-interval** *number*

<b>Description</b>	The base-2 logarithm of the mean announceInterval This is the mean time interval between successive Announce messages. The default log announce interval is defined by the profile. itug8275dot1: -3 (8 messages per second) itug8275dot2: 1 (1 message every two seconds)
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds log-announce-interval number</a>
<b>Tree</b>	<a href="#">log-announce-interval</a>
<b>Range</b>	-3 to 4
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**number-ports** *number*

<b>Description</b>	The number of PTP ports on the instance
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds number-ports number</a>
<b>Tree</b>	<a href="#">number-ports</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority1** *number*

<b>Description</b>	The IEEE Std 1588 priority1 of the PTP instance Since priority1 is one of the first comparisons performed by the Best Master Clock Algorithm (BMCA). Range is 0-255.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds priority1 number</a>
<b>Tree</b>	<a href="#">priority1</a>
<b>Range</b>	0 to 255
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**priority2** *number*

<b>Description</b>	The IEEE Std 1588 priority2 of the PTP instance The priority2 member is compared by the Best Master Clock Algorithm (BMCA) after priority1 and clockQuality. Lower values take precedence.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds priority2 number</a>

<b>Tree</b>	<a href="#">priority2</a>
<b>Range</b>	0 to 255
<b>Default</b>	128
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Aggregate statistics for the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-rx *number*

<b>Description</b>	Specifies the number of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics anno-msg-rx number</a>
<b>Tree</b>	<a href="#">anno-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-tx *number*

<b>Description</b>	Specifies the number of announce messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics anno-msg-tx number</a>
<b>Tree</b>	<a href="#">anno-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics del-req-msg-rx number</a>
<b>Tree</b>	<a href="#">del-req-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-req messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics del-req-msg-tx number</a>
<b>Tree</b>	<a href="#">del-req-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-resp messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics del-resp-msg-rx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-resp messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics del-resp-msg-tx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-tx</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-high-packet-loss *number*

**Description** The number of events with high packet loss for delay req packets

**Context** [system sync ptp instance instance-index number default-ds statistics delay-high-packet-loss number](#)

**Tree** [delay-high-packet-loss](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-packet-loss *number*

**Description** The number of events with detected packet loss for the delay request/response packets

**Context** [system sync ptp instance instance-index number default-ds statistics delay-packet-loss number](#)

**Tree** [delay-packet-loss](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### discards

**Description** Aggregate discard statistics for the PTP clock

**Context** [system sync ptp instance instance-index number default-ds statistics discards](#)

**Tree** [discards](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**alternate-master *number***

<b>Description</b>	Specifies the number of alternate master messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics discards alternate-master number</a>
<b>Tree</b>	<a href="#">alternate-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-domain *number***

<b>Description</b>	Specifies the number of bad domain messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics discards bad-domain number</a>
<b>Tree</b>	<a href="#">bad-domain</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other *number***

<b>Description</b>	Specifies the number of other messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics discards other number</a>
<b>Tree</b>	<a href="#">other</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-of-sequence *number***

<b>Description</b>	Specifies the number of out of sequence messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics discards out-of-sequence number</a>
<b>Tree</b>	<a href="#">out-of-sequence</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer-disabled** *number*

**Description** Specifies the number of PTP messages that were discarded from disabled PTP peer

Occurs when a PTP peer has been administratively disabled. This information is only available for configured and discovered peers.

**Context** [system sync ptp instance instance-index number default-ds statistics discards peer-disabled number](#)

**Tree** [peer-disabled](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-rx** *number*

**Description** Specifies the number of follow-up messages received

**Context** [system sync ptp instance instance-index number default-ds statistics follow-up-msg-rx number](#)

**Tree** [follow-up-msg-rx](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-tx** *number*

**Description** Specifies the number of follow-up messages transmitted

**Context** [system sync ptp instance instance-index number default-ds statistics follow-up-msg-tx number](#)

**Tree** [follow-up-msg-tx](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **multicast-msg-rate**

**Description** Aggregate multicast message rates for the PTP clock

<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate</a>
<b>Tree</b>	<a href="#">multicast-msg-rate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anno-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate anno-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">anno-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anno-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of announce messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate anno-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">anno-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-req-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate del-req-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">del-req-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False



**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-req-msg-rate-tx** *decimal-number*

**Description** Specifies the rate of messages of delay-req messages transmitted

**Context** [system sync ptp instance instance-index number default-ds statistics multicast-msg-rate del-req-msg-rate-tx decimal-number](#)

**Tree** [del-req-msg-rate-tx](#)

**Units** messages-per-second

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-resp-msg-rate-rx** *decimal-number*

**Description** Specifies the rate of messages of delay-resp messages received

**Context** [system sync ptp instance instance-index number default-ds statistics multicast-msg-rate del-resp-msg-rate-rx decimal-number](#)

**Tree** [del-resp-msg-rate-rx](#)

**Units** messages-per-second

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-resp-msg-rate-tx** *decimal-number*

**Description** Specifies the rate of messages of delay-resp messages transmitted

**Context** [system sync ptp instance instance-index number default-ds statistics multicast-msg-rate del-resp-msg-rate-tx decimal-number](#)

**Tree** [del-resp-msg-rate-tx](#)

**Units** messages-per-second

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate follow-up-msg-rate-rx</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">follow-up-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate follow-up-msg-rate-tx</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">follow-up-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate other-rate-rx</a> <i>decimal-number</i>
<b>Tree</b>	<a href="#">other-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of signaling messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate signaling-msg-rate-rx</a> <i>decimal-number</i>

<b>Tree</b>	<a href="#">signaling-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **signaling-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of signaling messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate signaling-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">signaling-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate sync-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">sync-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics multicast-msg-rate sync-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">sync-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other-rx number**

<b>Description</b>	Specifies the number of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics other-rx number</a>
<b>Tree</b>	<a href="#">other-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-msg-rx number</a>
<b>Tree</b>	<a href="#">signaling-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-msg-tx number</a>
<b>Tree</b>	<a href="#">signaling-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-uni-neg-tlv**

<b>Description</b>	Counts of different unicast negotiation TLVs
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv</a>
<b>Tree</b>	<a href="#">signaling-uni-neg-tlv</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-anno-rx *number***

**Description** Specifies the number of acknowledgements of cancels for announce messages have been received

**Context** [system sync ptp instance instance-index \*number\* default-ds statistics signaling-uni-neg-tlv ack-cancel-anno-rx \*number\*](#)

**Tree** [ack-cancel-anno-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-anno-tx *number***

**Description** Specifies the number of acknowledgements of cancels for announce messages have been transmitted

**Context** [system sync ptp instance instance-index \*number\* default-ds statistics signaling-uni-neg-tlv ack-cancel-anno-tx \*number\*](#)

**Tree** [ack-cancel-anno-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-delay-resp-rx *number***

**Description** Specifies the number of acknowledgements of cancels for delay-resp messages have been received

**Context** [system sync ptp instance instance-index \*number\* default-ds statistics signaling-uni-neg-tlv ack-cancel-delay-resp-rx \*number\*](#)

**Tree** [ack-cancel-delay-resp-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of acknowledgements of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv ack-cancel-delay-resp-tx</a> <i>number</i>
<b>Tree</b>	<a href="#">ack-cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-sync-rx** *number*

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv ack-cancel-sync-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">ack-cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-sync-tx** *number*

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv ack-cancel-sync-tx</a> <i>number</i>
<b>Tree</b>	<a href="#">ack-cancel-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-anno-rx** *number*

<b>Description</b>	Specifies the number of cancels for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv cancel-anno-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">cancel-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-anno-tx** *number*

<b>Description</b>	Specifies the number of cancels for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv cancel-anno-tx</a> <i>number</i>
<b>Tree</b>	<a href="#">cancel-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">default-ds statistics signaling-uni-neg-tlv cancel-delay-resp-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">cancel-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv cancel-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-sync-rx** *number*

<b>Description</b>	Specifies the number of cancels for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv cancel-sync-rx number</a>
<b>Tree</b>	<a href="#">cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-sync-tx** *number*

<b>Description</b>	Specifies the number of cancels for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv cancel-sync-tx number</a>
<b>Tree</b>	<a href="#">cancel-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**grant-anno-rx** *number*

<b>Description</b>	Specifies the number of grants for announce messages have been received
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-anno-rx number</a>
<b>Tree</b>	<a href="#">grant-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-anno-tx number**

<b>Description</b>	Specifies the number of grants for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-anno-tx number</a>
<b>Tree</b>	<a href="#">grant-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-delay-resp-rx number**

<b>Description</b>	Specifies the number of grants for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-delay-resp-tx number**

<b>Description</b>	Specifies the number of grants for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-tx</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-sync-rx number**

<b>Description</b>	Specifies the number of grants for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-sync-rx number</a>
<b>Tree</b>	<a href="#">grant-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-sync-tx number**

<b>Description</b>	Specifies the number of grants for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv grant-sync-tx number</a>
<b>Tree</b>	<a href="#">grant-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **other-tlv number**

<b>Description</b>	The count of unsupported signaling message TLVs received.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv other-tlv number</a>
<b>Tree</b>	<a href="#">other-tlv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-rx** *number*

<b>Description</b>	Specifies the number of rejections for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-anno-rx number</a>
<b>Tree</b>	<a href="#">reject-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-tx** *number*

<b>Description</b>	Specifies the number of rejections for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-anno-tx number</a>
<b>Tree</b>	<a href="#">reject-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">reject-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">reject-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-sync-rx** *number*

<b>Description</b>	Specifies the number of rejections for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-sync-rx number</a>
<b>Tree</b>	<a href="#">reject-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-sync-tx** *number*

<b>Description</b>	Specifies the number of rejections for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv reject-sync-tx number</a>
<b>Tree</b>	<a href="#">reject-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-anno-rx** *number*

<b>Description</b>	Specifies the number of requests for announce messages have been received
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-anno-rx number</a>
<b>Tree</b>	<a href="#">request-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-anno-tx number**

<b>Description</b>	Specifies the number of requests for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-anno-tx number</a>
<b>Tree</b>	<a href="#">request-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-delay-resp-rx number**

<b>Description</b>	Specifies the number of requests for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-delay-resp-tx number**

<b>Description</b>	Specifies the number of requests for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-tx</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-sync-rx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-sync-rx number</a>
<b>Tree</b>	<a href="#">request-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-sync-tx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics signaling-uni-neg-tlv request-sync-tx number</a>
<b>Tree</b>	<a href="#">request-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-high-packet-loss** *number*

<b>Description</b>	The number of events with high packet loss of sync packets
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics sync-high-packet-loss number</a>
<b>Tree</b>	<a href="#">sync-high-packet-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-rx** *number*

<b>Description</b>	Specifies the number of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics sync-msg-rx number</a>
<b>Tree</b>	<a href="#">sync-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-tx** *number*

<b>Description</b>	Specifies the number of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics sync-msg-tx number</a>
<b>Tree</b>	<a href="#">sync-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-packet-loss** *number*

<b>Description</b>	The number of events with detected packet loss of sync packets from the master clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics sync-packet-loss number</a>
<b>Tree</b>	<a href="#">sync-packet-loss</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unicast-msg-rate**

<b>Description</b>	Aggregate unicast message rates for the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate</a>
<b>Tree</b>	<a href="#">unicast-msg-rate</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anno-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate anno-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">anno-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anno-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of announce messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate anno-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">anno-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-req-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate del-req-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">del-req-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**del-req-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of delay-req messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate del-req-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">del-req-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of delay-resp messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate del-resp-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of delay-resp messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate del-resp-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate follow-up-msg-rate-rx decimal-number</a>

<b>Tree</b>	<a href="#">follow-up-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate follow-up-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">follow-up-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **other-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate other-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">other-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **signaling-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of signaling messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate signaling-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">signaling-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of signaling messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate signaling-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">signaling-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-rate-rx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate sync-msg-rate-rx decimal-number</a>
<b>Tree</b>	<a href="#">sync-msg-rate-rx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-rate-tx** *decimal-number*

<b>Description</b>	Specifies the rate of messages of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics unicast-msg-rate sync-msg-rate-tx decimal-number</a>
<b>Tree</b>	<a href="#">sync-msg-rate-tx</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-recovery-engine**

<b>Description</b>	Enter the time-recovery-engine context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine</a>

<b>Tree</b>	<a href="#">time-recovery-engine</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-adjustment** *number*

<b>Description</b>	Specifies the last adjustment in nanoseconds to the local time of the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine last-adjustment number</a>
<b>Tree</b>	<a href="#">last-adjustment</a>
<b>Units</b>	nanoseconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-adjustment-timestamp** *string*

<b>Description</b>	The time when last-adjustment was last calculated
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine last-adjustment-timestamp string</a>
<b>Tree</b>	<a href="#">last-adjustment-timestamp</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **recovery-state** *keyword*

<b>Description</b>	Specifies the current state of the time recovery engine in the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine recovery-state keyword</a>
<b>Tree</b>	<a href="#">recovery-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>not-applicable Not applicable to time recovery</li> <li>initial Initializing state</li> </ul>

- acquiring  
Acquiring state
- holdover  
Holdover state
- locked  
Locked state

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### state-last-changed *string*

<b>Description</b>	Specifies the last occurrence of a ptp state change for the time recovery engine
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine state-last-changed string</a>
<b>Tree</b>	<a href="#">state-last-changed</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### statistics

<b>Description</b>	Time recovery engine state statistics for the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delay-too-much-pdv *number*

<b>Description</b>	The number of events with high PDV for delay request/response packets for time recovery
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics delay-too-much-pdv number</a>

<b>Tree</b>	<a href="#">delay-too-much-pdv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-too-much-pdv** *number*

<b>Description</b>	The number of events with high PDV for sync packets for time recovery
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics sync-too-much-pdv number</a>
<b>Tree</b>	<a href="#">sync-too-much-pdv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-in-acquiring** *number*

<b>Description</b>	Specifies the number of seconds while in Acquiring state
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics time-in-acquiring number</a>
<b>Tree</b>	<a href="#">time-in-acquiring</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-in-holdover** *number*

<b>Description</b>	Specifies the number of seconds while in Holdover state
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics time-in-holdover number</a>
<b>Tree</b>	<a href="#">time-in-holdover</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-in-initial** *number*

<b>Description</b>	Specifies the number of seconds while in Initializing state
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics time-in-initial number</a>
<b>Tree</b>	<a href="#">time-in-initial</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-in-locked** *number*

<b>Description</b>	Specifies the number of seconds while in Locked state
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics time-in-locked number</a>
<b>Tree</b>	<a href="#">time-in-locked</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**two-step-flag** *boolean*

<b>Description</b>	Indicates if the clock is operating in two-step mode
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds two-step-flag boolean</a>
<b>Tree</b>	<a href="#">two-step-flag</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**parent-ds**

<b>Description</b>	The parent data set of the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds</a>
<b>Tree</b>	<a href="#">parent-ds</a>

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### grandmaster-clock-quality

<b>Description</b>	The clockQuality of the grandmaster clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-clock-quality</a>
<b>Tree</b>	<a href="#">grandmaster-clock-quality</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-accuracy *number*

<b>Description</b>	The clockAccuracy indicates the expected accuracy of the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-clock-quality clock-accuracy number</a>
<b>Tree</b>	<a href="#">clock-accuracy</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-class *number*

<b>Description</b>	The clockClass denotes the traceability of the time or frequency distributed by the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-clock-quality clock-class number</a>
<b>Tree</b>	<a href="#">clock-class</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### offset-scaled-log-variance *number*

<b>Description</b>	The offsetScaledLogVariance provides an estimate of the variations of the clock
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-clock-quality offset-scaled-log-variance number</a>
<b>Tree</b>	<a href="#">offset-scaled-log-variance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-identity** *binary*

<b>Description</b>	The clockIdentity of the grandmaster clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-identity binary</a>
<b>Tree</b>	<a href="#">grandmaster-identity</a>
<b>String Length</b>	8
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-priority1** *number*

<b>Description</b>	The priority1 attribute of the grandmaster clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-priority1 number</a>
<b>Tree</b>	<a href="#">grandmaster-priority1</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-priority2** *number*

<b>Description</b>	The priority2 attribute of the grandmaster clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds grandmaster-priority2 number</a>
<b>Tree</b>	<a href="#">grandmaster-priority2</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**parent-port-identity**

<b>Description</b>	The portIdentity of the port on the master
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds parent-port-identity</a>
<b>Tree</b>	<a href="#">parent-port-identity</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clock-identity** *binary*

<b>Description</b>	Identity of the parent clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds parent-port-identity clock-identity binary</a>
<b>Tree</b>	<a href="#">clock-identity</a>
<b>String Length</b>	8
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-number** *number*

<b>Description</b>	Port number of the parent clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds parent-port-identity port-number number</a>
<b>Tree</b>	<a href="#">port-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**protocol-address**

<b>Description</b>	The protocol address of the PTP Port that issues the Sync messages
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds protocol-address</a>
<b>Tree</b>	<a href="#">protocol-address</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip

**Description** Enter the ip context

**Context** [system sync ptp instance instance-index number parent-ds protocol-address ip](#)

**Tree** [ip](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ip-address (*ipv4-address* | *ipv6-address*)

**Description** IP address for the PTP peer

**Context** [system sync ptp instance instance-index number parent-ds protocol-address ip ip-address \(\*ipv4-address\* | \*ipv6-address\*\)](#)

**Tree** [ip-address](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## network-instance *reference*

**Description** Network instance containing the IP address

**Context** [system sync ptp instance instance-index number parent-ds protocol-address ip network-instance \*reference\*](#)

**Tree** [network-instance](#)

**Reference** [network-instance name \*string\*](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-address *string*

**Description** The MAC address of the PTP port  
This is only valid for PTP over ethernet encapsulation.

<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds protocol-address mac-address string</a>
<b>Tree</b>	<a href="#">mac-address</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-protocol *identityref*

<b>Description</b>	Protocol used by a PTP instance to transport PTP messages
<b>Context</b>	<a href="#">system sync ptp instance instance-index number parent-ds protocol-address network-protocol identityref</a>
<b>Tree</b>	<a href="#">network-protocol</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">udp-ipv4</a> UDP on IPv4. Numeric value is 0001 hex</li> <li>• <a href="#">udp-ipv6</a> UDP on IPv6. Numeric value is 0002 hex</li> <li>• <a href="#">ieee802-3</a> IEEE Std 802.3 (Ethernet). Numeric value is 0003 hex</li> <li>• <a href="#">devicenet</a> DeviceNet. Numeric value is 0004 hex</li> <li>• <a href="#">controlnet</a> ControlNet. Numeric value is 0005 hex</li> <li>• <a href="#">profinet</a> PROFINET. Numeric value is 0006 hex</li> <li>• <a href="#">otn</a> Optical Transport Network (OTN). Numeric value is 0007 hex</li> <li>• <a href="#">unknown</a> Unknown. Numeric value is FFFE hex</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-ds-cfg-ip-list [port-index number](#)

<b>Description</b>	List of port data sets for configured IP peers
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number</a>
<b>Tree</b>	<a href="#">port-ds-cfg-ip-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-index number**

<b>Description</b>	<p>Index into the port-ds list</p> <p>This is not the PTP port number. Configurable ports use port indices 1 through 999 but there is a limit on the overall number of these configured ports based on the platform and software release.</p> <p>The data sets (i.e., information model) of IEEE Std 1588-2008 specify a member portDS.portIdentity, which uses a typed struct with members clockIdentity and portNumber.</p> <p>In this YANG data model, portIdentity is not modeled in the port-ds. However, its members are provided as follows: portIdentity.portNumber is provided as this ptp-port-number leaf in port-ds, and portIdentity.clockIdentity is provided as the clock-identity leaf in default-ds of the instance (i.e., ../default-ds/clock-identity).</p>
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number</a>
<b>Range</b>	1 to 999
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **admin-state keyword**

<b>Description</b>	The administrative state of the ptp port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number admin-state keyword</a>
<b>Tree</b>	<a href="#">admin-state</a>
<b>Default</b>	disable
<b>Options</b>	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **announce-receipt-timeout** *number*

**Description** Sets the time limit for missed Announce packets before the master clock is deemed down

This command configures the announceReceiptTimeout value for all peer associations. This defines the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE\_RECEIPT\_TIMEOUT event. To change this setting, refer to announce-receipt-timeout in the Default data set.

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number announce-receipt-timeout number](#)

**Tree** [announce-receipt-timeout](#)

**Range** 2 to 10

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **best-master** *boolean*

**Description** Indicates if this peer was selected by the BMCA to be the best master

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number best-master boolean](#)

**Tree** [best-master](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clock-identity** *binary*

**Description** Identity of the peer clock

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number clock-identity binary](#)

**Tree** [clock-identity](#)

**String Length** 8

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### grandmaster-clock-quality

**Description** The clock quality of the grandmaster clock in the last Announce message received from this peer

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-clock-quality](#)

**Tree** [grandmaster-clock-quality](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-accuracy number

**Description** The clockAccuracy indicates the expected accuracy of the clock

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-clock-quality clock-accuracy number](#)

**Tree** [clock-accuracy](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clock-class number

**Description** The clockClass denotes the traceability of the time or frequency distributed by the clock

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-clock-quality clock-class number](#)

**Tree** [clock-class](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### offset-scaled-log-variance number

**Description** The offsetScaledLogVariance provides an estimate of the variations of the clock

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-clock-quality offset-scaled-log-variance number</a>
<b>Tree</b>	<a href="#">offset-scaled-log-variance</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-identity** *binary*

<b>Description</b>	The clockIdentity of the grandmaster clock in the last Announce message received from this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-identity binary</a>
<b>Tree</b>	<a href="#">grandmaster-identity</a>
<b>String Length</b>	8
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-priority1** *number*

<b>Description</b>	The priority1 of the grandmaster clock in the last Announce message received from this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-priority1 number</a>
<b>Tree</b>	<a href="#">grandmaster-priority1</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grandmaster-priority2** *number*

<b>Description</b>	The priority2 of the grandmaster clock in the last Announce message received from this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number grandmaster-priority2 number</a>
<b>Tree</b>	<a href="#">grandmaster-priority2</a>
<b>Configurable</b>	False



**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-rx-interface** *reference*

**Description** Interface used for the last PTP message received from this peer

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number last-rx-interface reference](#)

**Tree** [last-rx-interface](#)

**Reference** [interface name string](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **last-tx-interface** *reference*

**Description** Interface used for the last PTP message transmitted to this peer

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number last-tx-interface reference](#)

**Tree** [last-tx-interface](#)

**Reference** [interface name string](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-priority** *number*

**Description** Specifies the local priority of the ptp port

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number local-priority number](#)

**Tree** [local-priority](#)

**Range** 1 to 255

**Default** 128

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-announce-interval** *number*

<b>Description</b>	The base-2 logarithm of the mean announceInterval Mean time interval between successive Announce messages. To change this setting, refer to log-announce-interval in the Default data set.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number log-announce-interval number</a>
<b>Tree</b>	<a href="#">log-announce-interval</a>
<b>Range</b>	-3 to 4
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-min-delay-req-interval** *number*

<b>Description</b>	The base-2 logarithm of the minDelayReqInterval The minimum permitted mean time interval between successive Delay_Req messages. The value is not configurable. The delay messages use the same interval as for Sync messages (log-sync-interval)
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number log-min-delay-req-interval number</a>
<b>Tree</b>	<a href="#">log-min-delay-req-interval</a>
<b>Range</b>	-6 to 0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-sync-interval** *number*

<b>Description</b>	The base-2 logarithm of the mean SyncInterval for multicast messages The default log sync interval is defined by the profile. itug8275dot1: -4 (16 messages per second) itug8275dot2: -6 (64 messages per second) The rates for unicast transmissions are negotiated separately on a per-port basis and are not constrained by this attribute.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number log-sync-interval number</a>
<b>Tree</b>	<a href="#">log-sync-interval</a>
<b>Range</b>	-6 to 0

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### major-version-number *number*

<b>Description</b>	The PTP major version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number major-version-number number</a>
<b>Tree</b>	<a href="#">major-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minor-version-number *number*

<b>Description</b>	The PTP minor version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number minor-version-number number</a>
<b>Tree</b>	<a href="#">minor-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-clock *boolean*

<b>Description</b>	Indicates if this peer is the current parent clock of this PTP clock May differ from best-master due to use of local GNSS as time source.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number parent-clock boolean</a>
<b>Tree</b>	<a href="#">parent-clock</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### peer

<b>Description</b>	Enter the peer context
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number peer</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ip-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address for the PTP peer Only Unicast addresses are supported
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number peer ip-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **network-instance** *reference*

<b>Description</b>	Network instance used by this peer All configured peers use the same network-instance. It can be configured at the top level of the ptp tree.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number peer network-instance reference</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Reference</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-number** *number*

<b>Description</b>	Port number of the peer clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number port-number number</a>
<b>Tree</b>	<a href="#">port-number</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-state** *keyword*

**Description** Current state associated with the port

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number port-state keyword](#)

**Tree** [port-state](#)

**Options**

- initializing  
The port is initializing its data sets, hardware, and communication facilities
- faulty  
The port is in the fault state
- disabled  
The port is disabled and is not communicating PTP messages
- listening  
The port is listening for an Announce message
- pre-master  
The port is in the pre-master state
- master  
The port is behaving as a master port
- passive  
The port is in the passive state
- uncalibrated  
A master port has been selected, but the port is still in the uncalibrated state
- slave  
The port is synchronizing to the selected master port

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-port-number** *number*

**Description** IEEE Std 1588 portNumber  
This is the port-number that will appear in messages sent for this port-index.

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number ptp-port-number number</a>
<b>Tree</b>	<a href="#">ptp-port-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Total messages for a specific PTP port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-rx *number*

<b>Description</b>	Specifies the number of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics anno-msg-rx number</a>
<b>Tree</b>	<a href="#">anno-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-tx *number*

<b>Description</b>	Specifies the number of announce messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics anno-msg-tx number</a>
<b>Tree</b>	<a href="#">anno-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics del-req-msg-rx number</a>
<b>Tree</b>	<a href="#">del-req-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-req messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics del-req-msg-tx number</a>
<b>Tree</b>	<a href="#">del-req-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-resp messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics del-resp-msg-rx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-resp messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics del-resp-msg-tx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-tx</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## discards

**Description** Aggregate discard statistics for the PTP clock

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards](#)

**Tree** [discards](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## alternate-master number

**Description** Specifies the number of alternate master messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards alternate-master number](#)

**Tree** [alternate-master](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bad-domain number

**Description** Specifies the number of bad domain messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards bad-domain number](#)

**Tree** [bad-domain](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## other number

**Description** Specifies the number of other messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards other number](#)



<b>Tree</b>	<a href="#">other</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-of-sequence number**

<b>Description</b>	Specifies the number of out of sequence messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards out-of-sequence number</a>
<b>Tree</b>	<a href="#">out-of-sequence</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer-disabled number**

<b>Description</b>	Specifies the number of PTP messages that were discarded from disabled PTP peer  Occurs when a PTP peer has been administratively disabled. This information is only available for configured and discovered peers.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics discards peer-disabled number</a>
<b>Tree</b>	<a href="#">peer-disabled</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics follow-up-msg-rx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics follow-up-msg-tx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other-rx number**

<b>Description</b>	Specifies the number of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics other-rx number</a>
<b>Tree</b>	<a href="#">other-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-msg-rx number</a>
<b>Tree</b>	<a href="#">signaling-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-msg-tx number</a>
<b>Tree</b>	<a href="#">signaling-msg-tx</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### signaling-uni-neg-tlv

**Description** Counts of different unicast negotiation TLVs

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv](#)

**Tree** [signaling-uni-neg-tlv](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ack-cancel-anno-rx *number*

**Description** Specifies the number of acknowledgements of cancels for announce messages have been received

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-anno-rx number](#)

**Tree** [ack-cancel-anno-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ack-cancel-anno-tx *number*

**Description** Specifies the number of acknowledgements of cancels for announce messages have been transmitted

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-anno-tx number](#)

**Tree** [ack-cancel-anno-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-delay-resp-rx *number***

<b>Description</b>	Specifies the number of acknowledgements of cancels for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv ack-cancel-delay-resp-rx <i>number</i></a>
<b>Tree</b>	<a href="#">ack-cancel-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-delay-resp-tx *number***

<b>Description</b>	Specifies the number of acknowledgements of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv ack-cancel-delay-resp-tx <i>number</i></a>
<b>Tree</b>	<a href="#">ack-cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-sync-rx *number***

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv ack-cancel-sync-rx <i>number</i></a>
<b>Tree</b>	<a href="#">ack-cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ack-cancel-sync-tx** *number*

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-sync-tx number</a>
<b>Tree</b>	<a href="#">ack-cancel-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-anno-rx** *number*

<b>Description</b>	Specifies the number of cancels for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv cancel-anno-rx number</a>
<b>Tree</b>	<a href="#">cancel-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cancel-anno-tx** *number*

<b>Description</b>	Specifies the number of cancels for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv cancel-anno-tx number</a>
<b>Tree</b>	<a href="#">cancel-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-delay-resp-rx *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-delay-resp-rx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-delay-resp-tx *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-delay-resp-tx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-sync-rx *number*

<b>Description</b>	Specifies the number of cancels for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-cfg-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-sync-rx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-sync-tx *number*

<b>Description</b>	Specifies the number of cancels for sync messages have been transmitted
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv cancel-sync-tx number</a>
<b>Tree</b>	<a href="#">cancel-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-anno-rx number**

<b>Description</b>	Specifies the number of grants for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-anno-rx number</a>
<b>Tree</b>	<a href="#">grant-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-anno-tx number**

<b>Description</b>	Specifies the number of grants for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-anno-tx number</a>
<b>Tree</b>	<a href="#">grant-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-delay-resp-rx number**

<b>Description</b>	Specifies the number of grants for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-rx</a>
<b>Default</b>	0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of grants for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-sync-rx** *number*

<b>Description</b>	Specifies the number of grants for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-sync-rx number</a>
<b>Tree</b>	<a href="#">grant-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-sync-tx** *number*

<b>Description</b>	Specifies the number of grants for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv grant-sync-tx number</a>
<b>Tree</b>	<a href="#">grant-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**other-tlv** *number*

<b>Description</b>	The count of unsupported signaling message TLVs received.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv other-tlv number</a>
<b>Tree</b>	<a href="#">other-tlv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-rx** *number*

<b>Description</b>	Specifies the number of rejections for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-anno-rx number</a>
<b>Tree</b>	<a href="#">reject-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-tx** *number*

<b>Description</b>	Specifies the number of rejections for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-anno-tx number</a>
<b>Tree</b>	<a href="#">reject-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">reject-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">reject-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-sync-rx** *number*

<b>Description</b>	Specifies the number of rejections for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-sync-rx number</a>
<b>Tree</b>	<a href="#">reject-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-sync-tx** *number*

<b>Description</b>	Specifies the number of rejections for sync messages have been transmitted
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv reject-sync-tx number</a>
<b>Tree</b>	<a href="#">reject-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-anno-rx number**

<b>Description</b>	Specifies the number of requests for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-anno-rx number</a>
<b>Tree</b>	<a href="#">request-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-anno-tx number**

<b>Description</b>	Specifies the number of requests for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-anno-tx number</a>
<b>Tree</b>	<a href="#">request-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-delay-resp-rx number**

<b>Description</b>	Specifies the number of requests for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-rx</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of requests for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-sync-rx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-sync-rx number</a>
<b>Tree</b>	<a href="#">request-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-sync-tx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics signaling-uni-neg-tlv request-sync-tx number</a>
<b>Tree</b>	<a href="#">request-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-rx** *number*

<b>Description</b>	Specifies the number of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics sync-msg-rx number</a>
<b>Tree</b>	<a href="#">sync-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-tx** *number*

<b>Description</b>	Specifies the number of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number statistics sync-msg-tx number</a>
<b>Tree</b>	<a href="#">sync-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**steps-removed** *number*

<b>Description</b>	The stepsRemoved in the last Announce message received from this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number steps-removed number</a>
<b>Tree</b>	<a href="#">steps-removed</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**unicast-negotiation**

<b>Description</b>	Details of each negotiation session
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation</a>
<b>Tree</b>	<a href="#">unicast-negotiation</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rx-announce

**Description** Statistics for receive announce sessions

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-announce](#)

**Tree** [rx-announce](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## duration *number*

**Description** The duration, in seconds, requested/granted for unicast transmission between the PTP peers

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-announce duration number](#)

**Tree** [duration](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## log-interval *number*

**Description** The packet rate requested or granted for unicast transmission between the PTP peers

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-announce log-interval number](#)

**Tree** [log-interval](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## state *keyword*

**Description** Indicates the state of the negotiation

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-announce state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-announce time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rx-delay-resp**

<b>Description</b>	Statistics for receive delay-resp sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-delay-resp</a>
<b>Tree</b>	<a href="#">rx-delay-resp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **duration** *number*

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-delay-resp duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-delay-resp log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **state** *keyword*

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-delay-resp state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-delay-resp time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rx-sync**

<b>Description</b>	Statistics for receive sync sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-sync</a>
<b>Tree</b>	<a href="#">rx-sync</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration number**

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-sync duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval number**

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-sync log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### state *keyword*

**Description** Indicates the state of the negotiation

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-sync state keyword](#)

**Tree** [state](#)

**Options**

- pending
- granted
- denied
- expired
- canceled

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### time-of-last-grant *string*

**Description** The time when status last changed or the unicast session between the PTP clocks was renewed

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation rx-sync time-of-last-grant string](#)

**Tree** [time-of-last-grant](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tx-announce

**Description** Statistics for transmit announce sessions

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-announce](#)

**Tree** [tx-announce](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **duration** *number*

**Description** The duration, in seconds, requested/granted for unicast transmission between the PTP peers

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-announce duration number](#)

**Tree** [duration](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **log-interval** *number*

**Description** The packet rate requested or granted for unicast transmission between the PTP peers

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-announce log-interval number](#)

**Tree** [log-interval](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **state** *keyword*

**Description** Indicates the state of the negotiation

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-announce state keyword](#)

**Tree** [state](#)

**Options**

- pending
- granted
- denied
- expired
- canceled

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

**Description** The time when status last changed or the unicast session between the PTP clocks was renewed

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-announce time-of-last-grant string](#)

**Tree** [time-of-last-grant](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **tx-delay-resp**

**Description** Statistics for transmit delay-resp sessions

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-delay-resp](#)

**Tree** [tx-delay-resp](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **duration** *number*

**Description** The duration, in seconds, requested/granted for unicast transmission between the PTP peers

**Context** [system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-delay-resp duration number](#)

**Tree** [duration](#)

**Units** seconds

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-delay-resp log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-delay-resp state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-delay-resp time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tx-sync**

<b>Description</b>	Statistics for transmit sync sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-sync</a>
<b>Tree</b>	<a href="#">tx-sync</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration *number***

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-sync duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval *number***

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-sync log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state *keyword***

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-sync state keyword</a>

<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-cfg-ip-list port-index number unicast-negotiation tx-sync time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-ds-dsc-ip-list** [port-index number](#)

<b>Description</b>	List of port data sets for discovered IP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number</a>
<b>Tree</b>	<a href="#">port-ds-dsc-ip-list</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-index** *number*

<b>Description</b>	Index into the port-ds list This is not the PTP port number. Discovered IP peer ports are created based on Unicast negotiation.
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If an IP peer is a discovered IP peer and later that IP address is entered as a configured peer, then port DS information will move from this list to the port-ds-cfg-ip-list to cover both aspects of communication with this peer.

The data sets (i.e., information model) of IEEE Std 1588-2008 specify a member portDS.portIdentity, which uses a typed struct with members clockIdentity and portNumber.

In this YANG data model, portIdentity is not modeled in the port-ds. However, its members are provided as follows: portIdentity.portNumber is provided as this ptp-port-number leaf in port-ds, and portIdentity.clockIdentity is provided as the clock-identity leaf in default-ds of the instance (i.e., ../default-ds/clock-identity).

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-rx-interface *reference*

<b>Description</b>	Interface used for the last PTP message received from this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number last-rx-interface reference</a>
<b>Tree</b>	<a href="#">last-rx-interface</a>
<b>Reference</b>	<a href="#">interface name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### last-tx-interface *reference*

<b>Description</b>	Interface used for the last PTP message transmitted to this peer
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number last-tx-interface reference</a>
<b>Tree</b>	<a href="#">last-tx-interface</a>
<b>Reference</b>	<a href="#">interface name string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**log-announce-interval** *number*

<b>Description</b>	The base-2 logarithm of the mean announceInterval Mean time interval between successive Announce messages. This reports the value that was established during the unicast negotiation.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number log-announce-interval number</a>
<b>Tree</b>	<a href="#">log-announce-interval</a>
<b>Range</b>	-3 to 4
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-min-delay-req-interval** *number*

<b>Description</b>	The base-2 logarithm of the minDelayReqInterval This reports the value that was established during the unicast negotiation.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number log-min-delay-req-interval number</a>
<b>Tree</b>	<a href="#">log-min-delay-req-interval</a>
<b>Range</b>	-6 to 0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-sync-interval** *number*

<b>Description</b>	The base-2 logarithm of the mean SyncInterval for multicast messages This reports the value that was established during the unicast negotiation.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number log-sync-interval number</a>
<b>Tree</b>	<a href="#">log-sync-interval</a>
<b>Range</b>	-6 to 0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**major-version-number** *number*

<b>Description</b>	The PTP major version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number major-version-number number</a>
<b>Tree</b>	<a href="#">major-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minor-version-number** *number*

<b>Description</b>	The PTP minor version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number minor-version-number number</a>
<b>Tree</b>	<a href="#">minor-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer**

<b>Description</b>	Enter the peer context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number peer</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ip-address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP address for the PTP peer Only Unicast addresses are supported
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number peer ip-address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">ip-address</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### network-instance *reference*

**Description** Network instance that owns the PTP peer

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number peer network-instance reference](#)

**Tree** [network-instance](#)

**Reference** [network-instance name string](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-state *keyword*

**Description** Current state associated with the port

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number port-state keyword](#)

**Tree** [port-state](#)

**Options**

- initializing  
The port is initializing its data sets, hardware, and communication facilities
- faulty  
The port is in the fault state
- disabled  
The port is disabled and is not communicating PTP messages
- listening  
The port is listening for an Announce message
- pre-master  
The port is in the pre-master state
- master  
The port is behaving as a master port
- passive  
The port is in the passive state
- uncalibrated  
A master port has been selected, but the port is still in the uncalibrated state

- slave  
The port is synchronizing to the selected master port

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-port-number** *number*

<b>Description</b>	IEEE Std 1588 portNumber This is the port-number that will appear in messages sent for this port-index.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number ptp-port-number number</a>
<b>Tree</b>	<a href="#">ptp-port-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Total messages for a specific PTP port This container is not used with PTP special ports (gnss).
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **anno-msg-rx** *number*

<b>Description</b>	Specifies the number of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics anno-msg-rx number</a>
<b>Tree</b>	<a href="#">anno-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**anno-msg-tx** *number*

<b>Description</b>	Specifies the number of announce messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number</a> <a href="#">port-ds-dsc-ip-list port-index number</a> <a href="#">statistics anno-msg-tx number</a>
<b>Tree</b>	<a href="#">anno-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number</a> <a href="#">port-ds-dsc-ip-list port-index number</a> <a href="#">statistics del-req-msg-rx number</a>
<b>Tree</b>	<a href="#">del-req-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-req-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-req messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number</a> <a href="#">port-ds-dsc-ip-list port-index number</a> <a href="#">statistics del-req-msg-tx number</a>
<b>Tree</b>	<a href="#">del-req-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-rx** *number*

<b>Description</b>	Specifies the number of delay-resp messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number</a> <a href="#">port-ds-dsc-ip-list port-index number</a> <a href="#">statistics del-resp-msg-rx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rx</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-resp-msg-tx** *number*

**Description** Specifies the number of delay-resp messages transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics del-resp-msg-tx number](#)

**Tree** [del-resp-msg-tx](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **discards**

**Description** Aggregate discard statistics for the PTP clock

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards](#)

**Tree** [discards](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **alternate-master** *number*

**Description** Specifies the number of alternate master messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards alternate-master number](#)

**Tree** [alternate-master](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **bad-domain** *number*

**Description** Specifies the number of bad domain messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards bad-domain number](#)

<b>Tree</b>	<a href="#">bad-domain</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other number**

<b>Description</b>	Specifies the number of other messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards other number</a>
<b>Tree</b>	<a href="#">other</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**out-of-sequence number**

<b>Description</b>	Specifies the number of out of sequence messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards out-of-sequence number</a>
<b>Tree</b>	<a href="#">out-of-sequence</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer-disabled number**

<b>Description</b>	Specifies the number of PTP messages that were discarded from disabled PTP peer  Occurs when a PTP peer has been administratively disabled. This information is only available for configured and discovered peers.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics discards peer-disabled number</a>
<b>Tree</b>	<a href="#">peer-disabled</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics follow-up-msg-rx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**follow-up-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics follow-up-msg-tx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other-rx number**

<b>Description</b>	Specifies the number of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics other-rx number</a>
<b>Tree</b>	<a href="#">other-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-msg-rx number</a>
<b>Tree</b>	<a href="#">signaling-msg-rx</a>
<b>Configurable</b>	False



**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### signaling-msg-tx *number*

**Description** Specifies the number of follow-up messages transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-msg-tx number](#)

**Tree** [signaling-msg-tx](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### signaling-uni-neg-tlv

**Description** Counts of different unicast negotiation TLVs

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv](#)

**Tree** [signaling-uni-neg-tlv](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ack-cancel-anno-rx *number*

**Description** Specifies the number of acknowledgements of cancels for announce messages have been received

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-anno-rx number](#)

**Tree** [ack-cancel-anno-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ack-cancel-anno-tx *number*

**Description** Specifies the number of acknowledgements of cancels for announce messages have been transmitted

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-anno-tx number</a>
<b>Tree</b>	<a href="#">ack-cancel-anno-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-delay-resp-rx number**

<b>Description</b>	Specifies the number of acknowledgements of cancels for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">ack-cancel-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-delay-resp-tx number**

<b>Description</b>	Specifies the number of acknowledgements of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">ack-cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-sync-rx number**

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been received
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-sync-rx number</a>
<b>Tree</b>	<a href="#">ack-cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ack-cancel-sync-tx number**

<b>Description</b>	Specifies the number of acknowledgements of cancels for sync messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv ack-cancel-sync-tx number</a>
<b>Tree</b>	<a href="#">ack-cancel-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cancel-anno-rx number**

<b>Description</b>	Specifies the number of cancels for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv cancel-anno-rx number</a>
<b>Tree</b>	<a href="#">cancel-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cancel-anno-tx number**

<b>Description</b>	Specifies the number of cancels for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv cancel-anno-tx number</a>
<b>Tree</b>	<a href="#">cancel-anno-tx</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-delay-resp-rx *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-dsc-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-delay-resp-rx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-delay-resp-tx *number*

<b>Description</b>	Specifies the number of cancels for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-dsc-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-delay-resp-tx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### cancel-sync-rx *number*

<b>Description</b>	Specifies the number of cancels for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index <i>number</i> port-ds-dsc-ip-list port-index <i>number</i> statistics signaling-uni-neg-tlv cancel-sync-rx <i>number</i></a>
<b>Tree</b>	<a href="#">cancel-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **cancel-sync-tx** *number*

**Description** Specifies the number of cancels for sync messages have been transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv cancel-sync-tx number](#)

**Tree** [cancel-sync-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-anno-rx** *number*

**Description** Specifies the number of grants for announce messages have been received

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-anno-rx number](#)

**Tree** [grant-anno-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **grant-anno-tx** *number*

**Description** Specifies the number of grants for announce messages have been transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-anno-tx number](#)

**Tree** [grant-anno-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**grant-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of grants for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**grant-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of grants for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">grant-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**grant-sync-rx** *number*

<b>Description</b>	Specifies the number of grants for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-sync-rx number</a>
<b>Tree</b>	<a href="#">grant-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**grant-sync-tx** *number*

<b>Description</b>	Specifies the number of grants for sync messages have been transmitted
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv grant-sync-tx number</a>
<b>Tree</b>	<a href="#">grant-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**other-tlv number**

<b>Description</b>	The count of unsupported signaling message TLVs received.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv other-tlv number</a>
<b>Tree</b>	<a href="#">other-tlv</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-rx number**

<b>Description</b>	Specifies the number of rejections for announce messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv reject-anno-rx number</a>
<b>Tree</b>	<a href="#">reject-anno-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reject-anno-tx number**

<b>Description</b>	Specifies the number of rejections for announce messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv reject-anno-tx number</a>
<b>Tree</b>	<a href="#">reject-anno-tx</a>

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reject-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">port-ds-dsc-ip-list port-index</a> <i>number</i> <a href="#">statistics signaling-uni-neg-tlv reject-delay-resp-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">reject-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reject-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of rejections for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">port-ds-dsc-ip-list port-index</a> <i>number</i> <a href="#">statistics signaling-uni-neg-tlv reject-delay-resp-tx</a> <i>number</i>
<b>Tree</b>	<a href="#">reject-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reject-sync-rx** *number*

<b>Description</b>	Specifies the number of rejections for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i> <a href="#">port-ds-dsc-ip-list port-index</a> <i>number</i> <a href="#">statistics signaling-uni-neg-tlv reject-sync-rx</a> <i>number</i>
<b>Tree</b>	<a href="#">reject-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **reject-sync-tx** *number*

**Description** Specifies the number of rejections for sync messages have been transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv reject-sync-tx number](#)

**Tree** [reject-sync-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-anno-rx** *number*

**Description** Specifies the number of requests for announce messages have been received

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-anno-rx number](#)

**Tree** [request-anno-rx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **request-anno-tx** *number*

**Description** Specifies the number of requests for announce messages have been transmitted

**Context** [system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-anno-tx number](#)

**Tree** [request-anno-tx](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-delay-resp-rx** *number*

<b>Description</b>	Specifies the number of requests for delay-resp messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-delay-resp-rx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-delay-resp-tx** *number*

<b>Description</b>	Specifies the number of requests for delay-resp messages have been transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-delay-resp-tx number</a>
<b>Tree</b>	<a href="#">request-delay-resp-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-sync-rx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-sync-rx number</a>
<b>Tree</b>	<a href="#">request-sync-rx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**request-sync-tx** *number*

<b>Description</b>	Specifies the number of requests for sync messages have been transmitted
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics signaling-uni-neg-tlv request-sync-tx number</a>
<b>Tree</b>	<a href="#">request-sync-tx</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-rx number**

<b>Description</b>	Specifies the number of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics sync-msg-rx number</a>
<b>Tree</b>	<a href="#">sync-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **sync-msg-tx number**

<b>Description</b>	Specifies the number of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number statistics sync-msg-tx number</a>
<b>Tree</b>	<a href="#">sync-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **unicast-negotiation**

<b>Description</b>	Details of each negotiation session
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation</a>
<b>Tree</b>	<a href="#">unicast-negotiation</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rx-announce**

<b>Description</b>	Statistics for receive announce sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-announce</a>
<b>Tree</b>	<a href="#">rx-announce</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration *number***

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-announce duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval *number***

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-announce log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state *keyword***

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-announce state keyword</a>

<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-announce time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **rx-delay-resp**

<b>Description</b>	Statistics for receive delay-resp sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-delay-resp</a>
<b>Tree</b>	<a href="#">rx-delay-resp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **duration** *number*

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-delay-resp duration number</a>

<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-delay-resp log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **state** *keyword*

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-delay-resp state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-delay-resp time-of-last-grant string</a>

<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**rx-sync**

<b>Description</b>	Statistics for receive sync sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-sync</a>
<b>Tree</b>	<a href="#">rx-sync</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration *number***

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-sync duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval *number***

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-sync log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state keyword**

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-sync state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-of-last-grant string**

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation rx-sync time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tx-announce**

<b>Description</b>	Statistics for transmit announce sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-announce</a>
<b>Tree</b>	<a href="#">tx-announce</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**duration** *number*

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-announce duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-announce log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-announce state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-announce time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tx-delay-resp**

<b>Description</b>	Statistics for transmit delay-resp sessions
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-delay-resp</a>
<b>Tree</b>	<a href="#">tx-delay-resp</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration** *number*

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-delay-resp duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-delay-resp log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state keyword**

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-delay-resp state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> <li>• denied</li> <li>• expired</li> <li>• canceled</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-of-last-grant string**

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-delay-resp time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tx-sync**

<b>Description</b>	Statistics for transmit sync sessions
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-sync</a>
<b>Tree</b>	<a href="#">tx-sync</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**duration** *number*

<b>Description</b>	The duration, in seconds, requested/granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-sync duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Units</b>	seconds
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**log-interval** *number*

<b>Description</b>	The packet rate requested or granted for unicast transmission between the PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-sync log-interval number</a>
<b>Tree</b>	<a href="#">log-interval</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**state** *keyword*

<b>Description</b>	Indicates the state of the negotiation
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-sync state keyword</a>
<b>Tree</b>	<a href="#">state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pending</li> <li>• granted</li> </ul>

- denied
- expired
- canceled

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-of-last-grant** *string*

<b>Description</b>	The time when status last changed or the unicast session between the PTP clocks was renewed
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-dsc-ip-list port-index number unicast-negotiation tx-sync time-of-last-grant string</a>
<b>Tree</b>	<a href="#">time-of-last-grant</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-ds-gnss**

<b>Description</b>	List of port data sets for the GNSS special PTP port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss</a>
<b>Tree</b>	<a href="#">port-ds-gnss</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **best-master** *boolean*

<b>Description</b>	Indicates if this peer was selected by the BMCA to be the best master
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss best-master boolean</a>
<b>Tree</b>	<a href="#">best-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**major-version-number** *number*

<b>Description</b>	The PTP major version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss major-version-number number</a>
<b>Tree</b>	<a href="#">major-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**minor-version-number** *number*

<b>Description</b>	The PTP minor version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss minor-version-number number</a>
<b>Tree</b>	<a href="#">minor-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**parent-clock** *boolean*

<b>Description</b>	Indicates if this peer is the current parent clock of this PTP clock May differ from best-master due to use of local GNSS as time source.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss parent-clock boolean</a>
<b>Tree</b>	<a href="#">parent-clock</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-state** *keyword*

<b>Description</b>	Current state associated with the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss port-state keyword</a>
<b>Tree</b>	<a href="#">port-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>initializing</li> </ul> <p>The port is initializing its data sets, hardware, and communication facilities</p>

- faulty  
The port is in the fault state
- disabled  
The port is disabled and is not communicating PTP messages
- listening  
The port is listening for an Announce message
- pre-master  
The port is in the pre-master state
- master  
The port is behaving as a master port
- passive  
The port is in the passive state
- uncalibrated  
A master port has been selected, but the port is still in the uncalibrated state
- slave  
The port is synchronizing to the selected master port

<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-port-number** *number*

<b>Description</b>	IEEE Std 1588 portNumber
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-gnss ptp-port-number number</a>
<b>Tree</b>	<a href="#">ptp-port-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **port-ds-interface-list** [port-index](#) *number*

<b>Description</b>	List of port data sets for interfaces
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number</a>
<b>Tree</b>	<a href="#">port-ds-interface-list</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-index *number*

**Description** Index into the port-ds list

This is not the PTP port number. Configurable ports use port indices 1 through 999 but there is a limit on the overall number of these configured ports based on the platform and software release.

The data sets (i.e., information model) of IEEE Std 1588-2008 specify a member portDS.portIdentity, which uses a typed struct with members clockIdentity and portNumber.

In this YANG data model, portIdentity is not modeled in the port-ds. However, its members are provided as follows: portIdentity.portNumber is provided as this ptp-port-number leaf in port-ds, and portIdentity.clockIdentity is provided as the clock-identity leaf in default-ds of the instance (i.e., ../default-ds/clock-identity).

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number](#)

**Range** 1 to 999

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### admin-state *keyword*

**Description** The administrative state of the ptp port

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number admin-state keyword](#)

**Tree** [admin-state](#)

**Default** disable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**announce-receipt-timeout** *number*

<b>Description</b>	Sets the time limit for missed Announce packets before the master clock is deemed down  This defines the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event. To change this setting, refer to announce-receipt-timeout in the Default data set.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number announce-receipt-timeout number</a>
<b>Tree</b>	<a href="#">announce-receipt-timeout</a>
<b>Range</b>	2 to 10
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**best-master** *boolean*

<b>Description</b>	Indicates if this interface was selected by the BMCA to be the best master
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number best-master boolean</a>
<b>Tree</b>	<a href="#">best-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**dest-mac** *keyword*

<b>Description</b>	Configure the MAC address associated with forwardable or non-forwardable
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number dest-mac keyword</a>
<b>Tree</b>	<a href="#">dest-mac</a>
<b>Default</b>	forwardable
<b>Options</b>	<ul style="list-style-type: none"> <li>forwardable The clock uses the forwardable MAC address: 01-1B-19-00-00-00</li> <li>non-forwardable The clock uses the non-forwardable MAC address: 01-80-C2-00-00-0E</li> </ul>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### local-priority *number*

**Description** Specifies the local priority of the ptp port

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number local-priority number](#)

**Tree** [local-priority](#)

**Range** 1 to 255

**Default** 128

**Configurable** True

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### log-announce-interval *number*

**Description** The base-2 logarithm of the mean announceInterval  
Mean time interval between successive Announce messages. To change this setting, refer to log-announce-interval in the Default data set.

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number log-announce-interval number](#)

**Tree** [log-announce-interval](#)

**Range** -3 to 4

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### log-min-delay-req-interval *number*

**Description** The base-2 logarithm of the minDelayReqInterval  
The minimum permitted mean time interval between successive Delay\_Req messages. The default log-min-delay-req-interval is defined by the profile.  
itug8275dot1: -4 (16 messages per second) itug8275dot2: -6 (64 messages per second)

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number log-min-delay-req-interval number](#)

**Tree** [log-min-delay-req-interval](#)

<b>Range</b>	-6 to 0
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### log-sync-interval *number*

<b>Description</b>	The base-2 logarithm of the mean SyncInterval for multicast messages The default log sync interval is defined by the profile. itug8275dot1: -4 (16 messages per second) itug8275dot2: -6 (64 messages per second)
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number log-sync-interval number</a>
<b>Tree</b>	<a href="#">log-sync-interval</a>
<b>Range</b>	-6 to 0
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### major-version-number *number*

<b>Description</b>	The PTP major version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number major-version-number number</a>
<b>Tree</b>	<a href="#">major-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### master-only *boolean*

<b>Description</b>	Specifies the masterOnly attribute of the ptp port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number master-only boolean</a>
<b>Tree</b>	<a href="#">master-only</a>
<b>Default</b>	true
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minor-version-number** *number*

<b>Description</b>	The PTP minor version number in use on the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number minor-version-number number</a>
<b>Tree</b>	<a href="#">minor-version-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-count** *number*

<b>Description</b>	The number of neighbors for the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-count number</a>
<b>Tree</b>	<a href="#">neighbor-count</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**neighbor-list** [clock-identity binary port-number number](#)

<b>Description</b>	List of MAC address of all the neighbors of this port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number</a>
<b>Tree</b>	<a href="#">neighbor-list</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clock-identity** *binary*

<b>Description</b>	The clockIdentity of this neighbor clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number</a>
<b>String Length</b>	8
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### port-number *number*

**Description** The port number of this neighbor clock

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-address *string*

**Description** Specifies the MAC address of this neighbor

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number mac-address string](#)

**Tree** [mac-address](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### parent-clock *boolean*

**Description** Indicates if this neighbor is the current parent clock of this PTP clock

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number parent-clock boolean](#)

**Tree** [parent-clock](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### rx-message-rate *decimal-number*

**Description** The receive message rate from this neighbor clock

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number neighbor-list clock-identity binary port-number number rx-message-rate decimal-number</a>
<b>Tree</b>	<a href="#">rx-message-rate</a>
<b>Units</b>	messages-per-second
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**parent-clock** *boolean*

<b>Description</b>	Indicates if this interface is the current parent clock of this PTP clock May differ from best-master due to use of local GNSS as time source.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number parent-clock boolean</a>
<b>Tree</b>	<a href="#">parent-clock</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-state** *keyword*

<b>Description</b>	Current state associated with the port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number port-state keyword</a>
<b>Tree</b>	<a href="#">port-state</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• initializing The port is initializing its data sets, hardware, and communication facilities</li> <li>• faulty The port is in the fault state</li> <li>• disabled The port is disabled and is not communicating PTP messages</li> <li>• listening The port is listening for an Announce message</li> <li>• pre-master The port is in the pre-master state</li> <li>• master</li> </ul>

- The port is behaving as a master port
- passive
  - The port is in the passive state
- uncalibrated
  - A master port has been selected, but the port is still in the uncalibrated state
- slave
  - The port is synchronizing to the selected master port

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-port-number** *number*

<b>Description</b>	IEEE Std 1588 portNumber This is the port-number that will appear in messages sent for this port-index.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number ptp-port-number number</a>
<b>Tree</b>	<a href="#">ptp-port-number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source**

<b>Description</b>	Source interface used by this PTP port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number source</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interface** *reference*

<b>Description</b>	Enter the interface context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number source interface reference</a>

<b>Tree</b>	<a href="#">interface</a>
<b>Reference</b>	<a href="#">interface name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sync0

<b>Description</b>	Enable the sync0 context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number source</a> <a href="#">sync0</a>
<b>Tree</b>	<a href="#">sync0</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Total messages for a specific PTP port
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-rx *number*

<b>Description</b>	Specifies the number of announce messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics anno-msg-rx number</a>
<b>Tree</b>	<a href="#">anno-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## anno-msg-tx *number*

<b>Description</b>	Specifies the number of announce messages transmitted
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<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics anno-msg-tx number</a>
<b>Tree</b>	<a href="#">anno-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-req-msg-rx number**

<b>Description</b>	Specifies the number of delay-req messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics del-req-msg-rx number</a>
<b>Tree</b>	<a href="#">del-req-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-req-msg-tx number**

<b>Description</b>	Specifies the number of delay-req messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics del-req-msg-tx number</a>
<b>Tree</b>	<a href="#">del-req-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **del-resp-msg-rx number**

<b>Description</b>	Specifies the number of delay-resp messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics del-resp-msg-rx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**del-resp-msg-tx** *number*

<b>Description</b>	Specifies the number of delay-resp messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics del-resp-msg-tx number</a>
<b>Tree</b>	<a href="#">del-resp-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**discards**

<b>Description</b>	Aggregate discard statistics for the PTP clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards</a>
<b>Tree</b>	<a href="#">discards</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**alternate-master** *number*

<b>Description</b>	Specifies the number of alternate master messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards alternate-master number</a>
<b>Tree</b>	<a href="#">alternate-master</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**bad-domain** *number*

<b>Description</b>	Specifies the number of bad domain messages that were discarded
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards bad-domain number</a>
<b>Tree</b>	<a href="#">bad-domain</a>
<b>Configurable</b>	False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **other number**

**Description** Specifies the number of other messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards other number](#)

**Tree** [other](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **out-of-sequence number**

**Description** Specifies the number of out of sequence messages that were discarded

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards out-of-sequence number](#)

**Tree** [out-of-sequence](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer-disabled number**

**Description** Specifies the number of PTP messages that were discarded from disabled PTP peer

Occurs when a PTP peer has been administratively disabled. This information is only available for configured and discovered peers.

**Context** [system sync ptp instance instance-index number port-ds-interface-list port-index number statistics discards peer-disabled number](#)

**Tree** [peer-disabled](#)

**Configurable** False

**Platforms** 7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-rx number**

**Description** Specifies the number of follow-up messages received

<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics follow-up-msg-rx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **follow-up-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics follow-up-msg-tx number</a>
<b>Tree</b>	<a href="#">follow-up-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **other-rx number**

<b>Description</b>	Specifies the number of other messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics other-rx number</a>
<b>Tree</b>	<a href="#">other-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **signaling-msg-rx number**

<b>Description</b>	Specifies the number of follow-up messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics signaling-msg-rx number</a>
<b>Tree</b>	<a href="#">signaling-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**signaling-msg-tx number**

<b>Description</b>	Specifies the number of follow-up messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics signaling-msg-tx number</a>
<b>Tree</b>	<a href="#">signaling-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-rx number**

<b>Description</b>	Specifies the number of sync messages received
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics sync-msg-rx number</a>
<b>Tree</b>	<a href="#">sync-msg-rx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sync-msg-tx number**

<b>Description</b>	Specifies the number of sync messages transmitted
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface-list port-index number statistics sync-msg-tx number</a>
<b>Tree</b>	<a href="#">sync-msg-tx</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-properties-ds**

<b>Description</b>	The timeProperties data set of the clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds</a>
<b>Tree</b>	<a href="#">time-properties-ds</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-utc-offset** *number*

<b>Description</b>	The offset between TAI and UTC Only applies when the epoch of the PTP system is the PTP epoch in units of seconds (i.e. when ptp-timescale is TRUE). Otherwise, the value has no meaning.
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds current-utc-offset number</a>
<b>Tree</b>	<a href="#">current-utc-offset</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**current-utc-offset-valid** *boolean*

<b>Description</b>	When set to true, the current UTC offset is valid
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds current-utc-offset-valid boolean</a>
<b>Tree</b>	<a href="#">current-utc-offset-valid</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**frequency-traceable** *boolean*

<b>Description</b>	If true, the frequency determining the timescale is traceable to a primary reference
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds frequency-traceable boolean</a>
<b>Tree</b>	<a href="#">frequency-traceable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**leap59** *boolean*

<b>Description</b>	If true, the last minute of the current UTC day contains 59 seconds
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds leap59 boolean</a>

<b>Tree</b>	<a href="#">leap59</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**leap61** *boolean*

<b>Description</b>	If true, the last minute of the current UTC day contains 61 seconds
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds leap61</a> <i>boolean</i>
<b>Tree</b>	<a href="#">leap61</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ptp-timescale** *boolean*

<b>Description</b>	If true clock timescale of the grandmaster is PTP; false it is ARB (arbitrary)
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds ptp-timescale</a> <i>boolean</i>
<b>Tree</b>	<a href="#">ptp-timescale</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**time-source** *keyword*

<b>Description</b>	The source of time used by the grandmaster clock If a value is received that does not map to one of the enumerations, then the reserved value is used
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds time-source</a> <i>keyword</i>
<b>Tree</b>	<a href="#">time-source</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• atomic-clock</li> <li>• gps</li> <li>• terrestrial-radio</li> <li>• ptp</li> <li>• ntp</li> </ul>

- hand-set
- other
- internal-oscillator
- reserved

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **time-traceable** *boolean*

<b>Description</b>	If true, the timescale and the currentUtcOffset are traceable to a primary reference
<b>Context</b>	<a href="#">system sync ptp instance instance-index number time-properties-ds time-traceable</a> <i>boolean</i>
<b>Tree</b>	<a href="#">time-traceable</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ptp-profile** *keyword*

<b>Description</b>	Specifies the PTP profile mode for the PTP clock
<b>Context</b>	<a href="#">system sync ptp ptp-profile</a> <i>keyword</i>
<b>Tree</b>	<a href="#">ptp-profile</a>
<b>Default</b>	itug8275dot1
<b>Options</b>	<ul style="list-style-type: none"> <li>• itug8275dot1 ITU-T G.8275.1 (2014) Profile</li> <li>• itug8275dot2 ITU-T G.8275.2 Profile</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **timing-source-net-inst** *reference*

<b>Description</b>	Network instance to be used for configured peers
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This is the network instance that will be used to provide timing into the local clock via PTP over IP.

<b>Context</b>	<a href="#">system sync ptp timing-source-net-inst</a> <i>reference</i>
<b>Tree</b>	<a href="#">timing-source-net-inst</a>
<b>Reference</b>	<a href="#">network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## tls

<b>Description</b>	Top-level container for TLS configuration and state
<b>Context</b>	<a href="#">system tls</a>
<b>Tree</b>	<a href="#">tls</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## server-profile *name string*

<b>Description</b>	List of configured TLS server profiles
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i>
<b>Tree</b>	<a href="#">server-profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## name *string*

<b>Description</b>	Name of the TLS server-profile
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i>
<b>String Length</b>	1 to 247
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## authenticate-client *boolean*

<b>Description</b>	Defines if the server should authenticate the identity of connecting clients using the trust anchor
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<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">authenticate-client</a> <i>boolean</i>
<b>Tree</b>	<a href="#">authenticate-client</a>
<b>Default</b>	false
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **certificate** *string*

<b>Description</b>	Base64 encoded certificate to use with the private key This includes the '-----BEGIN CERTIFICATE-----' and '-----END CERTIFICATE-----' header and footer
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certificate</a> <i>string</i>
<b>Tree</b>	<a href="#">certificate</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **certificate-revocation-list** *string*

<b>Description</b>	Base64 encoded certificate revocation list This includes the '-----BEGIN X509 CRL' and '-----END X509 CRL' header and footer
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certificate-revocation-list</a> <i>string</i>
<b>Tree</b>	<a href="#">certificate-revocation-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **certz**

<b>Description</b>	Information relating to the active certificate and bundle/s as provided via Certz State is provided by the gNSI Certz service, and can be changed using the gNSI.Certz.Rotate RPC
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz</a>
<b>Tree</b>	<a href="#">certz</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## certificate

<b>Description</b>	State relating to the active certificate provided via Certz
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz certificate</a>
<b>Tree</b>	<a href="#">certificate</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy  The maps to the created_on field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz certificate created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s  The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz certificate version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## crl

<b>Description</b>	State relating to the active certificate revocation list provided via Certz The list of certificates provided will not be used to validate mTLS or servers, even if those certificates exist within the trust anchor.
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz</a> <a href="#">crl</a>
<b>Tree</b>	<a href="#">crl</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## created-on *string*

<b>Description</b>	The created on timestamp as provided by the gNSI client at the time of uploading the policy The maps to the created_on field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz</a> <a href="#">crl</a> <a href="#">created-on</a> <i>string</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version *string*

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">certz</a> <a href="#">crl</a> <a href="#">version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ssl-profile-id *string*

**Description** The ID of this gRPC server's SSL profile as used by the gNSI Certz service

**Context** [system tls server-profile name](#) *string* [certz ssl-profile-id](#) *string*

**Tree** [ssl-profile-id](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trust-anchor

**Description** State relating to the active trust anchor provided via Certz

This is equivalent to the certificate authority bundle, and is the list of certificates used to validate clients in mTLS, and to validate servers in outbound TLS.

**Context** [system tls server-profile name](#) *string* [certz trust-anchor](#)

**Tree** [trust-anchor](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### created-on *string*

**Description** The created on timestamp as provided by the gNSI client at the time of uploading the policy

The maps to the created\_on field within a Entity message in the Certz protobuf.

**Context** [system tls server-profile name](#) *string* [certz trust-anchor](#) [created-on](#) *string*

**Tree** [created-on](#)

**String Length** 20 to 32

<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version string**

<b>Description</b>	The version string as provided by the gNSI client at the time of uploading the certificate or bundle/s  The maps to the version field within a Entity message in the Certz protobuf.
<b>Context</b>	<a href="#">system tls server-profile name string certz trust-anchor version string</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cipher-list identityref**

<b>Description</b>	List of ciphers to use when negotiating TLS 1.2 with clients  TLS 1.3 cipher suites are always enabled: <a href="#">tls_aes_256_gcm_sha384</a> , <a href="#">tls_aes_128_gcm_sha256</a> , <a href="#">tls_chacha20_poly1305_sha256</a>
<b>Context</b>	<a href="#">system tls server-profile name string cipher-list identityref</a>
<b>Tree</b>	<a href="#">cipher-list</a>
<b>Default</b>	ecdhe-ecdsa-aes256-gcm-sha384
<b>Options</b>	<ul style="list-style-type: none"> <li>• ecdhe-rsa-aes256-gcm-sha384</li> <li>• ecdhe-ecdsa-aes256-gcm-sha384</li> <li>• ecdhe-rsa-aes256-sha384</li> <li>• ecdhe-ecdsa-aes256-sha384</li> <li>• ecdhe-rsa-aes256-sha</li> <li>• ecdhe-ecdsa-aes256-sha</li> <li>• dhe-dss-aes256-gcm-sha384</li> <li>• dhe-rsa-aes256-gcm-sha384</li> <li>• dhe-rsa-aes256-sha256</li> <li>• dhe-dss-aes256-sha256</li> <li>• dhe-rsa-aes256-sha</li> </ul>

- dhe-dss-aes256-sha
- dhe-rsa-camellia256-sha
- dhe-dss-camellia256-sha
- aes256-gcm-sha384
- aes256-sha256
- aes256-sha
- camellia256-sha
- psk-aes256-cbc-sha
- ecdhe-rsa-aes128-gcm-sha256
- ecdhe-ecdsa-aes128-gcm-sha256
- ecdhe-rsa-aes128-sha256
- ecdhe-ecdsa-aes128-sha256
- ecdhe-rsa-aes128-sha
- ecdhe-ecdsa-aes128-sha
- dhe-dss-aes128-gcm-sha256
- dhe-rsa-aes128-gcm-sha256
- dhe-rsa-aes128-sha256
- dhe-dss-aes128-sha256
- dhe-rsa-aes128-sha
- dhe-dss-aes128-sha
- dhe-rsa-seed-sha
- dhe-dss-seed-sha
- dhe-rsa-camellia128-sha
- dhe-dss-camellia128-sha
- aes128-gcm-sha256
- aes128-sha256
- aes128-sha
- seed-sha
- camellia128-sha
- psk-aes128-cbc-sha
- ecdhe-rsa-des-cbc3-sha
- ecdhe-ecdsa-des-cbc3-sha
- edh-rsa-des-cbc3-sha
- edh-dss-des-cbc3-sha
- des-cbc3-sha
- idea-cbc-sha

- psk-3des-edc-cbc-sha
- ecdhe-rsa-rc4-sha
- ecdhe-ecdsa-rc4-sha
- rc4-sha
- psk-rc4-sha

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### dynamic *boolean*

<b>Description</b>	Defines if the profile was dynamically created by service (for example gNSI Authz/Certz)
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">dynamic boolean</a>
<b>Tree</b>	<a href="#">dynamic</a>
<b>Configurable</b>	False
<b>Platforms</b>	Supported on all platforms

### key *string*

<b>Description</b>	Base64 encoded key to use with the server certificate This includes the '-----BEGIN PRIVATE KEY-----', and '-----END PRIVATE KEY-----' header and footer The value is hashed, and only the hashed value is kept
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">key string</a>
<b>Tree</b>	<a href="#">key</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### trust-anchor *string*

<b>Description</b>	Base64 encoded certificate to use as a trust anchor This includes the '-----BEGIN CERTIFICATE-----' and '-----END CERTIFICATE-----' header and footer
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">trust-anchor string</a>
<b>Tree</b>	<a href="#">trust-anchor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**use-tpm-devid** *keyword*

<b>Description</b>	Defines if the server profile key and certificate uses the TPM idevid or oidevid
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i> <a href="#">use-tpm-devid</a> <i>keyword</i>
<b>Tree</b>	<a href="#">use-tpm-devid</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>idevid The TPM iDevID key and certificate is used</li> <li>oidevid The TPM iDevID key and oIDevID certificate is used</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**trace-options** *keyword*

<b>Description</b>	Management server trace options
<b>Context</b>	<a href="#">system trace-options</a> <i>keyword</i>
<b>Tree</b>	<a href="#">trace-options</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>request</li> <li>response</li> <li>common</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**utilization**

<b>Description</b>	Configuration and state for each system resource
<b>Context</b>	<a href="#">system utilization</a>
<b>Tree</b>	<a href="#">utilization</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**resource** *name identityref*

<b>Description</b>	List of system-wide resources
<b>Context</b>	<a href="#">system utilization resource name identityref</a>
<b>Tree</b>	<a href="#">resource</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *identityref*

<b>Description</b>	The name of the resource
<b>Context</b>	<a href="#">system utilization resource name identityref</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>mpls-next-hops</b> MPLS next hop label forwarding entry resources Each MPLS next-hop that pushes an outgoing label stack uses one of these resources</li> <li>• <b>tunnels</b> Tunnel resources Each IP-in-IP, GRE or MPLS tunnel uses one of these resources</li> <li>• <b>ip-in-ip-tunnels</b> IP-in-IP tunnel resources Each originating IP-in-IP tunnel uses one of these resources</li> <li>• <b>ip-gre-tunnels</b> IP-over-GRE tunnel resources Each originating IP-over-GRE tunnel uses one of these resources</li> <li>• <b>vp-lag-groups</b> VP LAG group resources VP LAGs are needed by a NHG when it supports EVPN multi-homing</li> <li>• <b>protect-groups</b> Protect group IDs Each primary next-hop that needs fast failover to a backup next-hop needs a protect-group ID</li> </ul>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **free-entries** *number*

**Description** The number of entries that are currently free

**Context** [system utilization resource name](#) *identityref* [free-entries](#) *number*

**Tree** [free-entries](#)

**Configurable** False

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **upper-threshold-clear** *number*

**Description** Sets the threshold that triggers the generation of a NOTICE log and the setting of 'used-upper-threshold-exceeded' to 'false' whenever the utilization of the resource reaches this value in a falling direction

**Context** [system utilization resource name](#) *identityref* [upper-threshold-clear](#) *number*

**Tree** [upper-threshold-clear](#)

**Range** 0 to 100

**Default** 70

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **upper-threshold-set** *number*

**Description** Sets the threshold that triggers the generation of a WARNING log and the setting of 'used-upper-threshold-exceeded' to 'true' whenever the utilization of the resource reaches this value in a rising direction

**Context** [system utilization resource name](#) *identityref* [upper-threshold-set](#) *number*

**Tree** [upper-threshold-set](#)

**Range** 0 to 100

**Default** 90

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **used-entries** *number*

<b>Description</b>	The number of entries that are currently used
<b>Context</b>	<a href="#">system utilization resource name</a> <i>identityref</i> <a href="#">used-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">used-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **used-high-watermark** *number*

<b>Description</b>	A watermark of highest number of entries used for this resource
<b>Context</b>	<a href="#">system utilization resource name</a> <i>identityref</i> <a href="#">used-high-watermark</a> <i>number</i>
<b>Tree</b>	<a href="#">used-high-watermark</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **used-last-high-watermark-time** *string*

<b>Description</b>	The timestamp when the high-watermark was last updated
<b>Context</b>	<a href="#">system utilization resource name</a> <i>identityref</i> <a href="#">used-last-high-watermark-time</a> <i>string</i>
<b>Tree</b>	<a href="#">used-last-high-watermark-time</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-percent** *number*

<b>Description</b>	The percentage of the resource that is currently used
<b>Context</b>	<a href="#">system utilization resource name</a> <i>identityref</i> <a href="#">used-percent</a> <i>number</i>
<b>Tree</b>	<a href="#">used-percent</a>
<b>Range</b>	0 to 100
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**used-upper-threshold-exceeded** *boolean*

<b>Description</b>	This value is set to true when the used percentage value ( $\text{used} / (\text{used} + \text{free}) * 100$ ) has reached (in a rising direction) the configured upper-threshold-set for this resource and false when the used percentage value has reached (in a falling direction) the configured upper-threshold-clear for this resource
<b>Context</b>	<a href="#">system utilization resource name</a> <i>identityref</i> <a href="#">used-upper-threshold-exceeded</a> <i>boolean</i>
<b>Tree</b>	<a href="#">used-upper-threshold-exceeded</a>
<b>Configurable</b>	False
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 12 tools acl

```
acl
+ acl-filter name string type keyword
+   entry sequence-id number
+   statistics
+   clear
+ statistics
+ clear
+ interface interface-id string
+   input
+   acl-filter name string type keyword
+   entry sequence-id number
+   statistics
+   clear
+   statistics
+   clear
+   statistics
+   clear
+   output
+   acl-filter name string type keyword
+   entry sequence-id number
+   statistics
+   clear
+   statistics
+   clear
+   statistics
+   clear
+ policers
+   policer name string
+   statistics
+   clear
+   system-cpu-policer name string
+   statistics
+   clear
```

## 12.1 acl Descriptions

### acl

<b>Description</b>	Top level enclosing container for ACL operational tools
<b>Context</b>	<a href="#">acl</a>
<b>Tree</b>	<a href="#">acl</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### acl-filter *name string type keyword*

<b>Description</b>	List MAC, IPv4, IPv6 ACL filter policies
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	Reference to the ACL filter policy name
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### type *keyword*

<b>Description</b>	Defines the type of ACL filter: ipv4: IPv4 ACL filter ipv6: IPv6 ACL filter mac: MAC ACL filter
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter</a> <i>name string type keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4</li> <li>• ipv6</li> <li>• mac</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**entry** *sequence-id number*

<b>Description</b>	List of filter rules.
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**sequence-id** *number*

<b>Description</b>	A number to indicate the relative evaluation order of the different entries; lower numbered entries are evaluated before higher numbered entries
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Reset all aggregate and per-interface statistics associated with this particular entry to zero
<b>Context</b>	<a href="#">acl</a> <a href="#">acl-filter name</a> <i>string type keyword</i> <a href="#">entry</a> <a href="#">sequence-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
--------------------	------------------------------



<b>Context</b>	<a href="#">acl acl-filter name string type keyword statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all statistics of all entries of the filter to zero
<b>Context</b>	<a href="#">acl acl-filter name string type keyword statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## interface [interface-id string](#)

<b>Description</b>	List of interfaces and subinterfaces referencing ACL filters
<b>Context</b>	<a href="#">acl interface interface-id string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## interface-id [string](#)

<b>Description</b>	Identifier for the interface or subinterface
<b>Context</b>	<a href="#">acl interface interface-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## input

<b>Description</b>	Enter the input context
<b>Context</b>	<a href="#">acl interface interface-id string input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**acl-filter** *name string type keyword*

<b>Description</b>	List MAC, IPv4, IPv6 ACL filter policies
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword</a>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Reference to the ACL filter policy name
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Defines the type of ACL filter: ipv4: IPv4 ACL filter ipv6: IPv6 ACL filter mac: MAC ACL filter
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4</a></li> <li>• <a href="#">ipv6</a></li> <li>• <a href="#">mac</a></li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**entry** *sequence-id number*

<b>Description</b>	List of filter rules.
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword entry sequence-id number</a>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**sequence-id** *number*

<b>Description</b>	A number to indicate the relative evaluation order of the different entries; lower numbered entries are evaluated before higher numbered entries
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword entry sequence-id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword entry sequence-id number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Reset all aggregate and per-interface statistics associated with this particular entry to zero
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword entry sequence-id number statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id string input acl-filter name string type keyword statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Reset all statistics of all entries of the filter to zero
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">input statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**output**

<b>Description</b>	Enter the output context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**acl-filter** [name](#) *string* [type](#) *keyword*

<b>Description</b>	List MAC, IPv4, IPv6 ACL filter policies
--------------------	--

<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">acl-filter</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Reference to the ACL filter policy name
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	Defines the type of ACL filter: ipv4: IPv4 ACL filter ipv6: IPv6 ACL filter mac: MAC ACL filter
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ipv4</li> <li>• ipv6</li> <li>• mac</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**entry** [sequence-id](#) *number*

<b>Description</b>	List of filter rules.
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type</a> <i>keyword</i> <a href="#">entry sequence-id</a> <i>number</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**sequence-id** *number*

<b>Description</b>	A number to indicate the relative evaluation order of the different entries; lower numbered entries are evaluated before higher numbered entries
--------------------	--

<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">entry sequence-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all aggregate and per-interface statistics associated with this particular entry to zero
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">entry sequence-id</a> <i>number</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all statistics of all entries of the filter to zero
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output acl-filter name</a> <i>string</i> <a href="#">type keyword</a> <a href="#">statistics clear</a>

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">acl interface interface-id</a> <i>string</i> <a href="#">output statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## policers

<b>Description</b>	List of policers used by ACL entries
<b>Context</b>	<a href="#">acl policers</a>
<b>Tree</b>	<a href="#">policers</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## policer *name string*

<b>Description</b>	List of hardware policers
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the hardware policer
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Reset all statistics associated with this particular policer to zero
<b>Context</b>	<a href="#">acl policers policer name</a> <i>string</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**system-cpu-policer** [name](#) *string*

<b>Description</b>	List of system CPU policers
<b>Context</b>	<a href="#">acl policers system-cpu-policer</a> <a href="#">name</a> <i>string</i>
<b>Tree</b>	<a href="#">system-cpu-policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the system cpu policer
<b>Context</b>	<a href="#">acl policers system-cpu-policer</a> <a href="#">name</a> <i>string</i>



---

<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### clear

<b>Description</b>	Reset all statistics associated with this particular policer to zero
<b>Context</b>	<a href="#">acl policers system-cpu-policer name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## 13 tools bfd

```
bfd
+ micro-bfd-sessions
+ lag-interface name string
  + member-interface name string
  + clear
+ statistics
  + lag-interface name string
  + member-interface name string
  + clear
+ peer local-discriminator number
+ clear
+ statistics
+ peer local-discriminator number
+ clear
```

## 13.1 bfd Descriptions

### bfd

<b>Description</b>	Top-level grouping for bfd operational commands
<b>Context</b>	<a href="#">bfd</a>
<b>Tree</b>	<a href="#">bfd</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### micro-bfd-sessions

<b>Description</b>	Enter the micro-bfd-sessions context
<b>Context</b>	<a href="#">bfd micro-bfd-sessions</a>
<b>Tree</b>	<a href="#">micro-bfd-sessions</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### lag-interface *name string*

<b>Description</b>	Lag interface against which the clear command is to be executed
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name string</a>
<b>Tree</b>	<a href="#">lag-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Reference ID for associated lag interface Example: lag1 (Reference Interface lag1).
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>string</i>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**member-interface** *name string*

<b>Description</b>	List of member-interfaces to be cleared
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>string</i> <a href="#">member-interface name</a> <i>string</i>
<b>Tree</b>	<a href="#">member-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Reference ID for associated interface Example: ethernet-2/1 (Reference Interface ethernet-2/1).
<b>Context</b>	<a href="#">bfd micro-bfd-sessions lag-interface name</a> <i>string</i> <a href="#">member-interface name</a> <i>string</i>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear the associated micro-BFD sessions
--------------------	---

Clearing a micro-BFD sessions causes the associated sessions to transition to a Down state

**Context** [bfd micro-bfd-sessions lag-interface name string member-interface name string clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [bfd micro-bfd-sessions statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## lag-interface [name string](#)

**Description** Lag interface against which the clear command is to be executed

**Context** [bfd micro-bfd-sessions statistics lag-interface name string](#)

**Tree** [lag-interface](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name [string](#)

**Description** Reference ID for associated lag interface Example: lag1 (Reference Interface lag1).

**Context** [bfd micro-bfd-sessions statistics lag-interface name string](#)

**String Length** 3 to 20

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### member-interface *name string*

<b>Description</b>	List of member-interfaces to be cleared
<b>Context</b>	<a href="#">bfd micro-bfd-sessions statistics lag-interface name string member-interface name string</a>
<b>Tree</b>	<a href="#">member-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	Reference ID for associated interface Example: ethernet-2/1 (Reference Interface ethernet-2/1).
<b>Context</b>	<a href="#">bfd micro-bfd-sessions statistics lag-interface name string member-interface name string</a>
<b>String Length</b>	3 to 20
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

<b>Description</b>	Clear the BFD statistics associated with the micro-BFD sessions
<b>Context</b>	<a href="#">bfd micro-bfd-sessions statistics lag-interface name string member-interface name string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **peer local-discriminator number**

<b>Description</b>	The list of local-discriminators associated with BFD
<b>Context</b>	<a href="#">bfd peer local-discriminator number</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **local-discriminator number**

<b>Description</b>	BFD session local discriminator
<b>Context</b>	<a href="#">bfd peer local-discriminator number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear**

<b>Description</b>	Clear the associated BFD sessions Clearing a BFD sessions causes the associated BFD sessions ot transition to a Down state
<b>Context</b>	<a href="#">bfd peer local-discriminator number clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">bfd statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peer [local-discriminator number](#)

<b>Description</b>	The list of local-discriminators associated with BFD
<b>Context</b>	<a href="#">bfd statistics peer local-discriminator number</a>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## local-discriminator *number*

<b>Description</b>	BFD session local discriminator
<b>Context</b>	<a href="#">bfd statistics peer local-discriminator number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the BFD statistics associated with the BFD sessions
<b>Context</b>	<a href="#">bfd statistics peer local-discriminator number clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True



---

**Platforms**

7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L,  
7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250  
IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-  
X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 14 tools interface

```

interface name string
+ ethernet
+   statistics
+     clear
+     include-members
+ packet-link-qualification
+   cancel
+   id string
+   start
+   id string
+   qualification-profile string
+ resource
+ retry
+ statistics
+ clear
+   include-members
+ subinterface index number
+   bridge-table
+     mac-duplication
+       delete-all-macs
+       duplicate-entries
+         mac address string
+         delete-mac
+     mac-learning
+       delete-all-macs
+       learnt-entries
+         mac address string
+         delete-mac
+   ipv4
+     address ip-prefix string
+     vrrp-group virtual-router-id number
+     statistics
+     clear
+     arp
+     delete-dynamic
+     neighbor ipv4-address string
+     delete-dynamic
+     virtual-ipv4-discovery
+     address ipv4-address string
+     statistics
+     clear
+     statistics
+     clear
+     dhcp-relay
+     statistics
+     clear
+   ipv6
+     address ip-prefix string
+     vrrp-group virtual-router-id number
+     statistics
+     clear
+     dhcp-relay
+     statistics
+     clear
+     neighbor-discovery
+     delete-dynamic

```

```
+ neighbor ipv6-address string
  + delete-dynamic
+ virtual-ipv6-discovery
  + address ipv6-address string
    + statistics
      + clear
  + statistics
    + clear
+ statistics
+ clear
```

## 14.1 interface Descriptions

### interface *name string*

<b>Description</b>	The list of named interfaces on the device.
<b>Context</b>	<a href="#">interface name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	References the configured name of the interface
<b>Context</b>	<a href="#">interface name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ethernet

<b>Description</b>	Enter the ethernet context
<b>Context</b>	<a href="#">interface name string ethernet</a>
<b>Tree</b>	<a href="#">ethernet</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name string ethernet statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Clear interface ethernet statistics
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## include-members

<b>Description</b>	Causes the member link ethernet statistics to also be cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">ethernet statistics clear include-members</a>
<b>Tree</b>	<a href="#">include-members</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-link-qualification

<b>Description</b>	Enter the packet-link-qualification context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification</a>
<b>Tree</b>	<a href="#">packet-link-qualification</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## cancel

<b>Description</b>	Cancel the packet link qualification and delete the results
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">packet-link-qualification cancel</a>
<b>Tree</b>	<a href="#">cancel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**id string**

<b>Description</b>	Packet link qualification test ID
<b>Context</b>	<a href="#">interface name string packet-link-qualification cancel id string</a>
<b>Tree</b>	<a href="#">id</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**start**

<b>Description</b>	Start packet link qualification
<b>Context</b>	<a href="#">interface name string packet-link-qualification start</a>
<b>Tree</b>	<a href="#">start</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**id string**

<b>Description</b>	Packet link qualification test ID
<b>Context</b>	<a href="#">interface name string packet-link-qualification start id string</a>
<b>Tree</b>	<a href="#">id</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

**qualification-profile string**

<b>Description</b>	Packet link qualification profile name
<b>Context</b>	<a href="#">interface name string packet-link-qualification start qualification-profile string</a>
<b>Tree</b>	<a href="#">qualification-profile</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## resource

**Description** Enable the resource context

**Context** [interface name](#) *string* [resource](#)

**Tree** [resource](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## retry

**Description** Causes the specified lag to be reevaluate for missing system resources

**Context** [interface name](#) *string* [resource](#) [retry](#)

**Tree** [retry](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [interface name](#) *string* [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** Supported on all platforms

## clear

**Description** Clear interface statistics

**Context** [interface name](#) *string* [statistics](#) [clear](#)

**Tree** [clear](#)

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### include-members

<b>Description</b>	Causes the member link statistics to also be cleared
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">statistics clear</a> <a href="#">include-members</a>
<b>Tree</b>	<a href="#">include-members</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### subinterface *index number*

<b>Description</b>	The list of subinterfaces (logical interfaces) associated with a physical interface
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index number</i>
<b>Tree</b>	<a href="#">subinterface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### *index number*

<b>Description</b>	The index of the subinterface, or logical interface number
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index number</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### bridge-table

<b>Description</b>	Enter the bridge-table context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index number</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## mac-duplication

<b>Description</b>	Enable the mac-duplication context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-duplication</a>
<b>Tree</b>	<a href="#">mac-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## delete-all-macs

<b>Description</b>	Delete all learnt mac entries.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-duplication delete-all-macs</a>
<b>Tree</b>	<a href="#">delete-all-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## duplicate-entries

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-duplication duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## mac [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**address *string***

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">interface name <i>string</i></a> <a href="#">subinterface index <i>number</i></a> <a href="#">bridge-table mac-duplication duplicate-entries mac address <i>string</i></a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-mac**

<b>Description</b>	delete the duplicate mac address.
<b>Context</b>	<a href="#">interface name <i>string</i></a> <a href="#">subinterface index <i>number</i></a> <a href="#">bridge-table mac-duplication duplicate-entries mac address <i>string</i></a> <a href="#">delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac-learning**

<b>Description</b>	Enable the mac-learning context
<b>Context</b>	<a href="#">interface name <i>string</i></a> <a href="#">subinterface index <i>number</i></a> <a href="#">bridge-table mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-all-macs**

<b>Description</b>	Delete all learnt mac entries.
<b>Context</b>	<a href="#">interface name <i>string</i></a> <a href="#">subinterface index <i>number</i></a> <a href="#">bridge-table mac-learning delete-all-macs</a>
<b>Tree</b>	<a href="#">delete-all-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**learnt-entries**

<b>Description</b>	Enter the learnt-entries context
--------------------	----------------------------------

<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a>
<b>Tree</b>	<a href="#">learnt-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac** [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**address** *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-mac**

<b>Description</b>	delete the learnt mac address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv4**

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### address *ip-prefix string*

<b>Description</b>	Enter the address list instance
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string</a>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ip-prefix *string*

<b>Description</b>	Enter the ip-prefix context
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### vrrp-group *virtual-router-id number*

<b>Description</b>	VRRP Group Specific Configuration under IPv4 context
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string vrrp-group virtual-router-id number</a>
<b>Tree</b>	<a href="#">vrrp-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### virtual-router-id *number*

<b>Description</b>	VRRP Group Index
<b>Context</b>	<a href="#">interface name string subinterface index number ipv4 address ip-prefix string vrrp-group virtual-router-id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 address ip-prefix</a> <i>string</i> <a href="#">vrrp-group virtual-router-id</a> <i>number</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## arp

<b>Description</b>	Enable the arp context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp</a>
<b>Tree</b>	<a href="#">arp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## delete-dynamic

<b>Description</b>	Delete all dynamic ARP entries
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp delete-dynamic</a>
<b>Tree</b>	<a href="#">delete-dynamic</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor ipv4-address** *string*

<b>Description</b>	Enter the neighbor list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ipv4-address** *string*

<b>Description</b>	IPv4 address resolved by the ARP entry
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-dynamic**

<b>Description</b>	Delete one specific dynamic ARP entry
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp neighbor ipv4-address</a> <i>string</i> <a href="#">delete-dynamic</a>
<b>Tree</b>	<a href="#">delete-dynamic</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**virtual-ipv4-discovery**

<b>Description</b>	Enter the virtual-ipv4-discovery context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery</a>
<b>Tree</b>	<a href="#">virtual-ipv4-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** `ipv4-address` *string*

<b>Description</b>	The list of Virtual IP addresses
<b>Context</b>	<code>interface name</code> <i>string</i> <code>subinterface</code> <i>index</i> <i>number</i> <code>ipv4</code> <code>arp</code> <code>virtual-ipv4-discovery</code> <code>address</code> <code>ipv4-address</code> <i>string</i>
<b>Tree</b>	<code>address</code>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4-address** *string*

<b>Description</b>	The virtual IPv4 address.
<b>Context</b>	<code>interface name</code> <i>string</i> <code>subinterface</code> <i>index</i> <i>number</i> <code>ipv4</code> <code>arp</code> <code>virtual-ipv4-discovery</code> <code>address</code> <code>ipv4-address</code> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<code>interface name</code> <i>string</i> <code>subinterface</code> <i>index</i> <i>number</i> <code>ipv4</code> <code>arp</code> <code>virtual-ipv4-discovery</code> <code>address</code> <code>ipv4-address</code> <i>string</i> <code>statistics</code>
<b>Tree</b>	<code>statistics</code>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clears the statistics for the Virtual IP addresses
<b>Context</b>	<code>interface name</code> <i>string</i> <code>subinterface</code> <i>index</i> <i>number</i> <code>ipv4</code> <code>arp</code> <code>virtual-ipv4-discovery</code> <code>address</code> <code>ipv4-address</code> <i>string</i> <code>statistics</code> <code>clear</code>

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the global statistics for all the Virtual IP addresses
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 arp virtual-ipv4-discovery statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dhcp-relay

<b>Description</b>	Enable the dhcp-relay context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface index</a> <i>number</i> <a href="#">ipv4 dhcp-relay</a>
<b>Tree</b>	<a href="#">dhcp-relay</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <a href="#">dhcp-relay</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv4</a> <a href="#">dhcp-relay</a> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ipv6

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## address [ip-prefix](#) *string*

<b>Description</b>	Enter the address list instance
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">address</a> <a href="#">ip-prefix</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## [ip-prefix](#) *string*

<b>Description</b>	Enter the ip-prefix context
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<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **vrrp-group** [virtual-router-id](#) *number*

<b>Description</b>	VRRP Group Specific Configuration under IPv4 context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i>
<b>Tree</b>	<a href="#">vrrp-group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **virtual-router-id** *number*

<b>Description</b>	VRRP Group Index
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 address</a> <a href="#">ip-prefix</a> <i>string</i> <a href="#">vrrp-group</a> <a href="#">virtual-router-id</a> <i>number</i> <a href="#">statistics</a> <a href="#">clear</a>

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dhcp-relay

<b>Description</b>	Enable the dhcp-relay context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a>
<b>Tree</b>	<a href="#">dhcp-relay</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">dhcp-relay</a> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## neighbor-discovery

<b>Description</b>	Enable the neighbor-discovery context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a>
<b>Tree</b>	<a href="#">neighbor-discovery</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## delete-dynamic

**Description** Delete all dynamic neighbor cache entries

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 neighbor-discovery delete-dynamic](#)

**Tree** [delete-dynamic](#)

**Configurable** True

**Platforms** Supported on all platforms

## neighbor [ipv6-address](#) *string*

**Description** Enter the neighbor list instance

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 neighbor-discovery neighbor ipv6-address](#) *string*

**Tree** [neighbor](#)

**Configurable** True

**Platforms** Supported on all platforms

## ipv6-address *string*

**Description** IPv6 address resolved by the ND cache entry

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 neighbor-discovery neighbor ipv6-address](#) *string*

**Configurable** True

**Platforms** Supported on all platforms

## delete-dynamic

**Description** Delete one specific dynamic neighbor cache entry

**Context** [interface name](#) *string* [subinterface index](#) *number* [ipv6 neighbor-discovery neighbor ipv6-address](#) *string* [delete-dynamic](#)

**Tree** [delete-dynamic](#)

**Configurable** True

**Platforms** Supported on all platforms

## virtual-ipv6-discovery

<b>Description</b>	Enter the virtual-ipv6-discovery context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">virtual-ipv6-discovery</a>
<b>Tree</b>	<a href="#">virtual-ipv6-discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address [ipv6-address](#) *string*

<b>Description</b>	The list of Virtual IP addresses
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">virtual-ipv6-discovery</a> <a href="#">address</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## [ipv6-address](#) *string*

<b>Description</b>	The virtual IPv6 address.
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">virtual-ipv6-discovery</a> <a href="#">address</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">virtual-ipv6-discovery</a> <a href="#">address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">statistics</a>

<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the Virtual IP addresses
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery address</a> <a href="#">ipv6-address</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the global statistics for all the Virtual IP addresses
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <i>index</i> <i>number</i> <a href="#">ipv6 neighbor-discovery virtual-ipv6-discovery statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

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7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">interface name</a> <i>string</i> <a href="#">subinterface</a> <a href="#">index</a> <i>number</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## 15 tools network-instance

```

network-instance name string
+ bridge-table
+ mac-duplication
+ delete-macs-type keyword
+ duplicate-entries
+ mac address string
+ delete-mac
+ mac-learning
+ delete-all-macs
+ learnt-entries
+ mac address string
+ delete-mac
+ proxy-arp
+ duplicate
+ delete-all
+ entry address string
+ delete-ip
+ dynamic
+ delete-all
+ entry address string
+ delete-ip
+ proxy-nd
+ duplicate
+ delete-all
+ entry address string
+ delete-ip
+ dynamic
+ delete-all
+ entry address string
+ delete-ip
+ connection-point name string
+ bridge-table
+ mac-duplication
+ delete-all-macs
+ duplicate-entries
+ mac address string
+ delete-mac
+ mac-learning
+ delete-all-macs
+ learnt-entries
+ mac address string
+ delete-mac
+ icmp
+ statistics
+ clear
+ icmp6
+ statistics
+ clear
+ protocols
+ bgp
+ group group-name string
+ reset-peer
+ peer-as number
+ soft-clear
+ peer-as number
+ route-refresh identityref

```



```

+ neighbor peer-address (ipv4-address-with-zone | ipv6-address-with-zone)
+ reset-peer
+ soft-clear
  + route-refresh identityref
+ reset-peer
+ peer-as number
+ soft-clear
+ peer-as number
+ route-refresh identityref
+ igmp
+ interface interface-name string
+ membership-groups
  + clear
  + group group string
    + clear
    + source source string
      + clear
  + statistics
  + clear
+ version
+ clear
+ membership-groups
+ clear
+ group group string
  + clear
+ source source string
  + clear
+ statistics
+ clear
+ version
+ clear
+ igmp-snooping
+ interface interface-name string
+ membership-groups
  + clear
  + group group string
    + clear
    + source source string
      + clear
  + statistics
  + clear
+ membership-groups
+ clear
+ group group string
  + clear
+ source source string
  + clear
+ querier
+ clear
+ statistics
+ clear
+ isis
+ instance name string
+ interface interface-name string
  + adjacencies
  + clear
  + ldp-synchronization
  + exit
+ link-state-database
+ clear
+ statistics
+ clear
+ ldp
+ discovery

```

```

+ interfaces
+ interface name string
+ ipv4
+ statistics
+ clear
+ ipv6
+ statistics
+ clear
+ targeted
+ ipv4
+ target remote-address string
+ statistics
+ clear
+ ipv6
+ target remote-address string
+ statistics
+ clear
+ peers
+ peer lsr-id (ipv4-address | ipv6-address) label-space-id number
+ reset
+ statistics
+ clear
+ reset-overload
+ statistics
+ clear
+ targeted-auto-rx
+ hold-time number
+ mld
+ interface interface-name string
+ membership-groups
+ clear
+ group group string
+ clear
+ source source string
+ clear
+ statistics
+ clear
+ version
+ clear
+ membership-groups
+ clear
+ group group string
+ clear
+ source source string
+ clear
+ statistics
+ clear
+ version
+ clear
+ mld-snooping
+ interface interface-name string
+ membership-groups
+ clear
+ group group string
+ clear
+ source source string
+ clear
+ statistics
+ clear
+ membership-groups
+ clear
+ group group string
+ clear
+ source source string

```

```

    + clear
+ quier
+ clear
+ statistics
+ clear
+ ospf
+ instance name string
+ area area-id
+ interface interface-name string
+ neighbors
+ clear
+ ldp-synchronization
+ exit
+ link-state-database
+ clear
+ manual-spf
+ run
+ neighbors
+ clear
+ neighbor neighbor-id
+ clear
+ overload
+ clear
+ statistics
+ clear
+ pim
+ database
+ group group (ipv4-address | ipv6-address)
+ clear
+ interface interface-name string
+ clear
+ source source (ipv4-address | ipv6-address)
+ clear
+ interface interface-name string
+ clear
+ interface interface-name string
+ ipv4
+ clear
+ ipv6
+ clear
+ ipv4
+ clear
+ ipv6
+ clear
+ neighbor
+ interface interface-name string
+ ipv4
+ clear
+ ipv6
+ clear
+ ipv4
+ clear
+ ipv6
+ clear
+ statistics
+ group group (ipv4-address | ipv6-address)
+ clear
+ source source (ipv4-address | ipv6-address)
+ clear
+ interface interface-name string
+ ipv4
+ clear
+ ipv6
+ clear

```

```
+   + ipv4
+     + clear
+   + ipv6
+     + clear
+ route-table
+   + ipv4-unicast
+     + longest-prefix-match
+       + ipv4-address string
+   + ipv6-unicast
+     + longest-prefix-match
+       + ipv6-address string
+ traffic-engineering-policies
+   + policy policy-name string
+     + segment-list segment-list-index number
+       + clear
+       + resignal
```

## 15.1 network-instance Descriptions

### network-instance *name string*

<b>Description</b>	Enter the network-instance list instance
<b>Context</b>	<a href="#">network-instance name string</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### name *string*

<b>Description</b>	A unique name identifying the network instance
<b>Context</b>	<a href="#">network-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### bridge-table

<b>Description</b>	bridge-table
<b>Context</b>	<a href="#">network-instance name string bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### mac-duplication

<b>Description</b>	Enable the mac-duplication context
<b>Context</b>	<a href="#">network-instance name string bridge-table mac-duplication</a>
<b>Tree</b>	<a href="#">mac-duplication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-macs-type** *keyword*

<b>Description</b>	Type of duplicate mac entries to delete.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">delete-macs-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">delete-macs-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• all</li> <li>• blackhole-only</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**duplicate-entries**

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac** [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**address** *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-mac**

<b>Description</b>	delete the duplicate mac address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-duplication</a> <a href="#">duplicate-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac-learning**

<b>Description</b>	Enable the mac-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**delete-all-macs**

<b>Description</b>	Delete all learnt mac entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">delete-all-macs</a>
<b>Tree</b>	<a href="#">delete-all-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**learnt-entries**

<b>Description</b>	Enter the learnt-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a>
<b>Tree</b>	<a href="#">learnt-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**mac [address](#) *string***

<b>Description</b>	macs learnt on the bridging instance
--------------------	--------------------------------------

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### delete-mac

<b>Description</b>	delete the learnt mac address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">mac-learning</a> <a href="#">learnt-entries</a> <a href="#">mac address</a> <i>string</i> <a href="#">delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### proxy-arp

<b>Description</b>	Enable the proxy-arp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a>
<b>Tree</b>	<a href="#">proxy-arp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### duplicate

<b>Description</b>	Enable the duplicate context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate</a>
<b>Tree</b>	<a href="#">duplicate</a>



<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delete-all**

<b>Description</b>	Delete all entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate</a> <a href="#">delete-all</a>
<b>Tree</b>	<a href="#">delete-all</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**entry address string**

<b>Description</b>	proxy-arp entry to delete
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate</a> <a href="#">entry</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**address string**

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate</a> <a href="#">entry</a> <a href="#">address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delete-ip**

<b>Description</b>	delete the proxy entry.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">duplicate</a> <a href="#">entry</a> <a href="#">address</a> <i>string</i> <a href="#">delete-ip</a>
<b>Tree</b>	<a href="#">delete-ip</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dynamic

<b>Description</b>	Enable the dynamic context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic</a>
<b>Tree</b>	<a href="#">dynamic</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-all

<b>Description</b>	Delete all entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic</a> <a href="#">delete-all</a>
<b>Tree</b>	<a href="#">delete-all</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entry *address string*

<b>Description</b>	proxy-arp entry to delete
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic</a> <a href="#">entry</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">entry</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">bridge-table</a> <a href="#">proxy-arp</a> <a href="#">dynamic</a> <a href="#">entry</a> <a href="#">address</a> <i>string</i>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-ip

**Description** delete the proxy entry.

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-arp](#) [dynamic](#) [entry](#) [address](#) *string* [delete-ip](#)

**Tree** [delete-ip](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## proxy-nd

**Description** Enable the proxy-nd context

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#)

**Tree** [proxy-nd](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## duplicate

**Description** Enable the duplicate context

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [duplicate](#)

**Tree** [duplicate](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-all

**Description** Delete all entries.

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [duplicate](#) [delete-all](#)

**Tree** [delete-all](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### entry address string

**Description** proxy-nd entry to delete

**Context** [network-instance name string bridge-table proxy-nd duplicate entry address string](#)

**Tree** [entry](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### address string

**Description** Enter the address context

**Context** [network-instance name string bridge-table proxy-nd duplicate entry address string](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-ip

**Description** delete the proxy entry.

**Context** [network-instance name string bridge-table proxy-nd duplicate entry address string delete-ip](#)

**Tree** [delete-ip](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### dynamic

**Description** Enable the dynamic context

**Context** [network-instance name string bridge-table proxy-nd dynamic](#)

**Tree** [dynamic](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-all

**Description** Delete all entries.

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [dynamic](#) [delete-all](#)

**Tree** [delete-all](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## entry [address](#) *string*

**Description** proxy-nd entry to delete

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [dynamic](#) [entry](#) [address](#) *string*

**Tree** [entry](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## address *string*

**Description** Enter the address context

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [dynamic](#) [entry](#) [address](#) *string*

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-ip

**Description** delete the proxy entry.

**Context** [network-instance name](#) *string* [bridge-table](#) [proxy-nd](#) [dynamic](#) [entry](#) [address](#) *string* [delete-ip](#)

**Tree** [delete-ip](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### connection-point *name string*

**Description** Connection-point information.  
**Context** [network-instance name string](#) [connection-point name string](#)  
**Tree** [connection-point](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

**Description** A unique name identifying the connection-point  
**Context** [network-instance name string](#) [connection-point name string](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### bridge-table

**Description** bridge-table  
**Context** [network-instance name string](#) [connection-point name string](#) [bridge-table](#)  
**Tree** [bridge-table](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mac-duplication

**Description** Enable the mac-duplication context  
**Context** [network-instance name string](#) [connection-point name string](#) [bridge-table](#) [mac-duplication](#)  
**Tree** [mac-duplication](#)  
**Configurable** True  
**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delete-all-macs**

<b>Description</b>	Delete all learnt mac entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication delete-all-macs</a>
<b>Tree</b>	<a href="#">delete-all-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**duplicate-entries**

<b>Description</b>	Enter the duplicate-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries</a>
<b>Tree</b>	<a href="#">duplicate-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**mac** *address string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**address** *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-mac

<b>Description</b>	delete the duplicate mac address.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-duplication duplicate-entries mac address</a> <i>string</i> <a href="#">delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## mac-learning

<b>Description</b>	Enable the mac-learning context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning</a>
<b>Tree</b>	<a href="#">mac-learning</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-all-macs

<b>Description</b>	Delete all learnt mac entries.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning delete-all-macs</a>
<b>Tree</b>	<a href="#">delete-all-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## learnt-entries

<b>Description</b>	Enter the learnt-entries context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">connection-point name</a> <i>string</i> <a href="#">bridge-table mac-learning learnt-entries</a>
<b>Tree</b>	<a href="#">learnt-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S



## mac address string

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">connection-point name string</a> <a href="#">bridge-table mac-learning learnt-entries mac address string</a>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## address string

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">connection-point name string</a> <a href="#">bridge-table mac-learning learnt-entries mac address string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-mac

<b>Description</b>	delete the learnt mac address.
<b>Context</b>	<a href="#">network-instance name string</a> <a href="#">connection-point name string</a> <a href="#">bridge-table mac-learning learnt-entries mac address string delete-mac</a>
<b>Tree</b>	<a href="#">delete-mac</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## icmp

<b>Description</b>	Enter the icmp context
<b>Context</b>	<a href="#">network-instance name string icmp</a>
<b>Tree</b>	<a href="#">icmp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	ICMP version 4 statistics
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Resets all the YANG state counters under network-instance/icmp/statistics to zero
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## icmp6

<b>Description</b>	Enter the icmp6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6</a>
<b>Tree</b>	<a href="#">icmp6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	ICMP version 6 statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Resets all the YANG state counters under network-instance/icmp6/statistics to zero
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">icmp6 statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## protocols

<b>Description</b>	The routing protocols that are enabled for this network-instance.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a>
<b>Tree</b>	<a href="#">protocols</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## bgp

<b>Description</b>	Enable the bgp context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a>
<b>Tree</b>	<a href="#">bgp</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## group [group-name](#) *string*

<b>Description</b>	Enter the group list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">group</a> <a href="#">group-name</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## group-name *string*

<b>Description</b>	The configured name of the peer group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">bgp</a> <a href="#">group</a> <a href="#">group-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reset-peer**

<b>Description</b>	Enable the reset-peer context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">reset-peer</a>
<b>Tree</b>	<a href="#">reset-peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-as** *number*

<b>Description</b>	Hard reset only BGP peers in the peer-group that have the specified peer-AS number, whether they are configured peers or dynamic peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">reset-peer peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**soft-clear**

<b>Description</b>	Enable the soft-clear context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">soft-clear</a>
<b>Tree</b>	<a href="#">soft-clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-as** *number*

<b>Description</b>	Soft reset only BGP peers in the peer-group that have the specified peer-AS number, whether they are configured peers or dynamic peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">soft-clear peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **route-refresh** *identityref*

<b>Description</b>	The address family to refresh This is encoded in the ROUTE_REFRESH message. By default all families are refreshed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp group group-name</a> <i>string</i> <a href="#">soft-clear route-refresh</a> <i>identityref</i>
<b>Tree</b>	<a href="#">route-refresh</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <a href="#">ipv6-labeled-unicast</a> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <a href="#">evpn</a> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <a href="#">route-target</a> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <a href="#">sr-policy-ipv4</a> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <a href="#">sr-policy-ipv6</a> SR-TE Policy (AFI 2, SAFI 73)</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbor peer-address** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	Enter the neighbor list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-address** (*ipv4-address-with-zone | ipv6-address-with-zone*)

<b>Description</b>	The transport address of the BGP peer  The peer-address must be a valid IPv4 unicast address or a valid IPv6 global unicast address. Sessions to a link-local IPv6 address are not supported.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reset-peer**

<b>Description</b>	Hard reset the peer
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">reset-peer</a>
<b>Tree</b>	<a href="#">reset-peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**soft-clear**

<b>Description</b>	Enable the soft-clear context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <a href="#">soft-clear</a>
<b>Tree</b>	<a href="#">soft-clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-refresh** *identityref*

<b>Description</b>	The address family to refresh  This is encoded in the ROUTE_REFRESH message. By default all families are refreshed.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp neighbor peer-address</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">soft-clear route-refresh identityref</a>
<b>Tree</b>	<a href="#">route-refresh</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">ipv4-unicast</a> Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)</li> <li>• <a href="#">ipv6-unicast</a> Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)</li> <li>• <a href="#">l3vpn-ipv4-unicast</a> VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)</li> <li>• <a href="#">l3vpn-ipv6-unicast</a> VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)</li> <li>• <a href="#">ipv4-labeled-unicast</a> Labeled IPv4 unicast routes (AFI 1, SAFI 4)</li> <li>• <a href="#">ipv6-labeled-unicast</a> Labeled IPv6 unicast routes (AFI 2, SAFI 4)</li> <li>• <a href="#">evpn</a> EVPN routes (AFI = 25, SAFI = 70)</li> <li>• <a href="#">route-target</a> Route target constraint routes (AFI 1, SAFI 132)</li> <li>• <a href="#">sr-policy-ipv4</a> SR-TE Policy (AFI 1, SAFI 73)</li> <li>• <a href="#">sr-policy-ipv6</a> SR-TE Policy (AFI 2, SAFI 73)</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reset-peer**

<b>Description</b>	Enable the reset-peer context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp reset-peer</a>

<b>Tree</b>	<a href="#">reset-peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-as** *number*

<b>Description</b>	Hard reset only BGP peers that have the specified peer-AS number, whether they are configured peers or dynamic peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp reset-peer peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**soft-clear**

<b>Description</b>	Enable the soft-clear context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp soft-clear</a>
<b>Tree</b>	<a href="#">soft-clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**peer-as** *number*

<b>Description</b>	Soft reset only BGP peers that have the specified peer-AS number, whether they are configured peers or dynamic peers
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols bgp soft-clear peer-as</a> <i>number</i>
<b>Tree</b>	<a href="#">peer-as</a>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**route-refresh** *identityref*

<b>Description</b>	The address family to refresh  This is encoded in the ROUTE_REFRESH message. By default all families are refreshed.
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**Context** [network-instance name](#) *string* [protocols bgp soft-clear route-refresh identityref](#)

**Tree** [route-refresh](#)

- Options**
- [ipv4-unicast](#)  
Unlabeled IPv4 unicast routes (AFI = 1, SAFI = 1)
  - [ipv6-unicast](#)  
Unlabeled IPv6 unicast routes (AFI = 2, SAFI = 1)
  - [l3vpn-ipv4-unicast](#)  
VPN-IPv4 unicast address family (AFI = 1, SAFI = 128)
  - [l3vpn-ipv6-unicast](#)  
VPN-IPv6 unicast address family (AFI = 2, SAFI = 128)
  - [ipv4-labeled-unicast](#)  
Labeled IPv4 unicast routes (AFI 1, SAFI 4)
  - [ipv6-labeled-unicast](#)  
Labeled IPv6 unicast routes (AFI 2, SAFI 4)
  - [evpn](#)  
EVPN routes (AFI = 25, SAFI = 70)
  - [route-target](#)  
Route target constraint routes (AFI 1, SAFI 132)
  - [sr-policy-ipv4](#)  
SR-TE Policy (AFI 1, SAFI 73)
  - [sr-policy-ipv6](#)  
SR-TE Policy (AFI 2, SAFI 73)

**Configurable** True

**Platforms** Supported on all platforms

## igmp

**Description** Enable the igmp context

**Context** [network-instance name](#) *string* [protocols igmp](#)

**Tree** [igmp](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** `interface-name` *string*

<b>Description</b>	List of IGMP interfaces
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols igmp interface interface-name</code> <i>string</i>
<b>Tree</b>	<code>interface</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols igmp interface interface-name</code> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**membership-groups**

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols igmp interface interface-name</code> <i>string</i> <code>membership-groups</code>
<b>Tree</b>	<code>membership-groups</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all IGMP memberships for this interface
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols igmp interface interface-name</code> <i>string</i> <code>membership-groups clear</code>
<b>Tree</b>	<code>clear</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** `group string`

<b>Description</b>	Multicast group membership
<b>Context</b>	<code>network-instance name string protocols igmp interface interface-name string membership-groups group group string</code>
<b>Tree</b>	<code>group</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** `string`

<b>Description</b>	Multicast address
<b>Context</b>	<code>network-instance name string protocols igmp interface interface-name string membership-groups group group string</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all IGMP memberships for this group on this interface
<b>Context</b>	<code>network-instance name string protocols igmp interface interface-name string membership-groups group group string clear</code>
<b>Tree</b>	<code>clear</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** `source string`

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<code>network-instance name string protocols igmp interface interface-name string membership-groups group group string source source string</code>
<b>Tree</b>	<code>source</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all IGMP memberships for this source on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Reset IGMP statistics for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version

<b>Description</b>	Enter the version context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">version</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Reset the IGMP operational version for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp interface interface-name</a> <i>string</i> <a href="#">version clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## membership-groups

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the IGMP memberships for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp membership-groups clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** `group string`

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name string protocols igmp membership-groups group group string</a>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** `string`

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name string protocols igmp membership-groups group group string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all IGMP memberships for this group on all interfaces
<b>Context</b>	<a href="#">network-instance name string protocols igmp membership-groups group group string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** `source string`

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name string protocols igmp membership-groups group group string source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## source *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols igmp membership-groups group group <i>string</i> source source <i>string</i></a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear all IGMP memberships for this group on all interfaces
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols igmp membership-groups group group <i>string</i> source source <i>string</i> clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols igmp statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Reset IGMP statistics for all interfaces
<b>Context</b>	<a href="#">network-instance name <i>string</i> protocols igmp statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version**

<b>Description</b>	Enter the version context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp version</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Reset the IGMP operational version for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp version clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**igmp-snooping**

<b>Description</b>	Enable the igmp-snooping context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping</a>
<b>Tree</b>	<a href="#">igmp-snooping</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface** [interface-name](#) *string*

<b>Description</b>	List of IGMP SNOOPING interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**membership-groups**

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all IGMP SNOOPING memberships for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group *string*

**Description** Multicast address

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [membership-groups group group \*string\*](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### clear

**Description** Clear all IGMP SNOOPING memberships for this group on this interface

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [membership-groups group group \*string\*](#) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source [source \*string\*](#)

**Description** Source addresses of multicast

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [membership-groups group group \*string\*](#) [source source \*string\*](#)

**Tree** [source](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *string*

**Description** Source address of multicast

**Context** [network-instance name \*string\*](#) [protocols igmp-snooping interface interface-name \*string\*](#) [membership-groups group group \*string\*](#) [source source \*string\*](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

**Description** Clear all IGMP SNOOPING memberships for this source on this interface

**Context** [network-instance name](#) *string* [protocols igmp-snooping interface interface-name](#) *string* [membership-groups group group](#) *string* [source source](#) *string* [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [protocols igmp-snooping interface interface-name](#) *string* [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

**Description** Reset IGMP SNOOPING statistics for this interface

**Context** [network-instance name](#) *string* [protocols igmp-snooping interface interface-name](#) *string* [statistics clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## membership-groups

**Description** Enter the membership-groups context

**Context** [network-instance name](#) *string* [protocols igmp-snooping membership-groups](#)

<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all IGMP SNOOPING memberships for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all IGMP SNOOPING memberships for this group on all interfaces
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group group</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all IGMP SNOOPING memberships for this source on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## querier

<b>Description</b>	Enter the querier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier</a>
<b>Tree</b>	<a href="#">querier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

<b>Description</b>	Clear all IGMP SNOOPING querier info on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping querier clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

<b>Description</b>	Reset IGMP SNOOPING statistics for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols igmp-snooping statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**isis**

<b>Description</b>	Enable the isis context
<b>Context</b>	<a href="#">network-instance name string protocols isis</a>
<b>Tree</b>	<a href="#">isis</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**instance name string**

<b>Description</b>	List of IS-IS protocol instances associated with this network-instance. Only a single instance is supported for now
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string</a>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

**name string**

<b>Description</b>	The name of the IS-IS instance
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface interface-name string**

<b>Description</b>	List of IS-IS interfaces
<b>Context</b>	<a href="#">network-instance name string protocols isis instance name string interface interface-name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**adjacencies**

<b>Description</b>	Enter the adjacencies context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacencies</a>
<b>Tree</b>	<a href="#">adjacencies</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Reset all of the adjacencies on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">interface interface-name</a> <i>string</i> <a href="#">adjacencies clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ldp-synchronization**

<b>Description</b>	IS-IS LDP-IGP synchronisation
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**exit**

<b>Description</b>	Advertise the normal metric for all IS-IS interfaces, even if some are configured for LDP synchronization and ISIS is not in sync with LDP on these interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">ldp-synchronization exit</a>
<b>Tree</b>	<a href="#">exit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**link-state-database**

<b>Description</b>	The ISIS link state database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">link-state-database</a>
<b>Tree</b>	<a href="#">link-state-database</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Clear the contents of the LSDB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">link-state-database clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all of the IS-IS instance statistics to zero.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols isis instance name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ldp

<b>Description</b>	Operational tools commands for LDP.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp</a>
<b>Tree</b>	<a href="#">ldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## discovery

<b>Description</b>	Enter the discovery context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery</a>
<b>Tree</b>	<a href="#">discovery</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interfaces

<b>Description</b>	Enter the interfaces context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery interfaces</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface** *name string*

<b>Description</b>	Enter the interface list instance
<b>Context</b>	<a href="#">network-instance name string protocols ldp discovery interfaces interface name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Reference type to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string protocols ldp discovery interfaces interface name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4**

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">network-instance name string protocols ldp discovery interfaces interface name string ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name string protocols ldp discovery interfaces interface name string ipv4 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True

---

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Resets all the LDP instance state counters to zero

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv4 statistics clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

**Description** Enter the ipv6 context

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv6](#)

**Tree** [ipv6](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv6 statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Resets all the LDP instance state counters to zero

**Context** [network-instance name \*string\* protocols ldp discovery interfaces interface name \*string\* ipv6 statistics clear](#)

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## targeted

<b>Description</b>	Enter the targeted context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted</a>
<b>Tree</b>	<a href="#">targeted</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	Enter the ipv4 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## target [remote-address](#) *string*

<b>Description</b>	Enter the target list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## remote-address *string*

<b>Description</b>	Reference to neighbor address of the targeted LDP adjacency.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Resets all the LDP target counters to zero
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv4 target remote-address</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6**

<b>Description</b>	Enter the ipv6 context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**target** [remote-address](#) *string*

<b>Description</b>	Enter the target list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i>
<b>Tree</b>	<a href="#">target</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## remote-address *string*

<b>Description</b>	Reference to neighbor address of the targeted LDP adjacency.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Resets all the LDP target counters to zero
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp discovery targeted ipv6 target remote-address</a> <i>string</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## peers

<b>Description</b>	Enter the peers context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers</a>
<b>Tree</b>	<a href="#">peers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**peer** *lsr-id (ipv4-address | ipv6-address) label-space-id number*

<b>Description</b>	List of peers.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address   ipv6-address)</a> <a href="#">label-space-id</a> <i>number</i>
<b>Tree</b>	<a href="#">peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**lsr-id** *(ipv4-address | ipv6-address)*

<b>Description</b>	The LSR ID of the peer, to identify the globally unique LSR. This leaf is used together with the leaf 'label-space-id' to form the LDP ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address   ipv6-address)</a> <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**label-space-id** *number*

<b>Description</b>	The Label Space ID of the peer, to identify a specific label space within the LSR. This is the last two octets of the LDP ID. This leaf is used together with the leaf 'lsr-id' to form the LDP ID.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address   ipv6-address)</a> <a href="#">label-space-id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**reset**

<b>Description</b>	Reset the LDP session by closing the TCP connection and establishing a new one.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ldp peers peer lsr-id (ipv4-address   ipv6-address)</a> <a href="#">label-space-id</a> <i>number</i> <a href="#">reset</a>
<b>Tree</b>	<a href="#">reset</a>
<b>Configurable</b>	True



**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address* | *ipv6-address*) [label-space-id](#) *number* [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Resets all the LDP instance state counters to zero

**Context** [network-instance name](#) *string* [protocols ldp peers peer lsr-id](#) (*ipv4-address* | *ipv6-address*) [label-space-id](#) *number* [statistics](#) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## reset-overload

**Description** Enable the reset-overload context

**Context** [network-instance name](#) *string* [protocols ldp reset-overload](#)

**Tree** [reset-overload](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

**Description** Enter the statistics context

**Context** [network-instance name](#) *string* [protocols ldp statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Resets all the LDP instance state counters to zero

**Context** [network-instance name](#) *string* [protocols ldp statistics clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## targeted-auto-rx

**Description** Enter the targeted-auto-rx context

**Context** [network-instance name](#) *string* [protocols ldp targeted-auto-rx](#)

**Tree** [targeted-auto-rx](#)

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## hold-time *number*

**Description** Hold-time during which new auto-rx targeted peers will not be generated

**Context** [network-instance name](#) *string* [protocols ldp targeted-auto-rx hold-time number](#)

**Tree** [hold-time](#)

**Range** 1 to 65535

**Units** seconds

**Configurable** True

**Platforms** 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mld

**Description** Enable the mld context

**Context** [network-instance name](#) *string* [protocols mld](#)

**Tree** [mld](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface *interface-name* *string*

**Description** List of MLD interfaces

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string*

**Tree** [interface](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

**Description** Reference to a specific subinterface of the form <interface-name>.<subinterface-index>

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string*

**String Length** 5 to 25

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### membership-groups

**Description** Enter the membership-groups context

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups](#)

**Tree** [membership-groups](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

**Description** Clear all MLD memberships for this interface

**Context** [network-instance name](#) *string* [protocols mld interface interface-name](#) *string* [membership-groups clear](#)

**Tree** [clear](#)

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *group string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string membership-groups group group string</a>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string membership-groups group group string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all MLD memberships for this group on this interface
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string membership-groups group group string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *source string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name string protocols mld interface interface-name string membership-groups group group string source source string</a>

<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all MLD memberships for this source on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Reset MLD statistics for this interface
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version

<b>Description</b>	Enter the version context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">version</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Reset the MLD operational version for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld interface interface-name</a> <i>string</i> <a href="#">version clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## membership-groups

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear the MLD memberships for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**group** *string*

<b>Description</b>	Multicast address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups group</a> <a href="#">group</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all MLD memberships for this group on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld membership-groups group</a> <a href="#">group</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *source string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name string protocols mld membership-groups group group string source source string</a>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name string protocols mld membership-groups group group string source source string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all MLD memberships for this group on all interfaces
<b>Context</b>	<a href="#">network-instance name string protocols mld membership-groups group group string source source string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name string protocols mld statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## clear

<b>Description</b>	Reset MLD statistics for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## version

<b>Description</b>	Enter the version context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld version</a>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Reset the MLD operational version for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld version clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## mld-snooping

<b>Description</b>	Enable the mld-snooping context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping</a>
<b>Tree</b>	<a href="#">mld-snooping</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface** `interface-name` *string*

<b>Description</b>	List of MLD SNOOPING interfaces
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols mld-snooping interface interface-name</code> <i>string</i>
<b>Tree</b>	<code>interface</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols mld-snooping interface interface-name</code> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**membership-groups**

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols mld-snooping interface interface-name</code> <i>string</i> <code>membership-groups</code>
<b>Tree</b>	<code>membership-groups</code>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all MLD SNOOPING memberships for this interface
<b>Context</b>	<code>network-instance name</code> <i>string</i> <code>protocols mld-snooping interface interface-name</code> <i>string</i> <code>membership-groups</code> <code>clear</code>
<b>Tree</b>	<code>clear</code>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group *group string*

**Description** Multicast group membership

**Context** [network-instance name string protocols mld-snooping interface interface-name string membership-groups group group string](#)

**Tree** [group](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### group *string*

**Description** Multicast address

**Context** [network-instance name string protocols mld-snooping interface interface-name string membership-groups group group string](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### clear

**Description** Clear all MLD SNOOPING memberships for this group on this interface

**Context** [network-instance name string protocols mld-snooping interface interface-name string membership-groups group group string clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### source *source string*

**Description** Source addresses of multicast

**Context** [network-instance name string protocols mld-snooping interface interface-name string membership-groups group group string source source string](#)

**Tree** [source](#)

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all MLD SNOOPING memberships for this source on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Reset MLD SNOOPING statistics for this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping interface interface-name</a> <i>string</i> <a href="#">statistics clear</a>

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## membership-groups

<b>Description</b>	Enter the membership-groups context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">membership-groups</a>
<b>Tree</b>	<a href="#">membership-groups</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

<b>Description</b>	Clear all MLD SNOOPING memberships for all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">membership-groups</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group [group](#) *string*

<b>Description</b>	Multicast group membership
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols</a> <a href="#">mld-snooping</a> <a href="#">membership-groups</a> <a href="#">group</a> <a href="#">group</a> <i>string</i>
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## group *string*

<b>Description</b>	Multicast address
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping membership-groups group group</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all MLD SNOOPING memberships for this group on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping membership-groups group group</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** [source](#) *string*

<b>Description</b>	Source addresses of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping membership-groups group group</a> <i>string</i> <a href="#">source</a> <a href="#">source</a> <i>string</i>
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source** *string*

<b>Description</b>	Source address of multicast
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping membership-groups group group</a> <i>string</i> <a href="#">source</a> <a href="#">source</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**clear**

<b>Description</b>	Clear all MLD SNOOPING memberships for this source on all interfaces
--------------------	--

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping membership-groups group group</a> <i>string</i> <a href="#">source source</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## querier

<b>Description</b>	Enter the querier context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier</a>
<b>Tree</b>	<a href="#">querier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

<b>Description</b>	Clear all MLD SNOOPING querier info on all interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping querier clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## clear

<b>Description</b>	Reset MLD SNOOPING statistics for all interfaces
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols mld-snooping statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## ospf

<b>Description</b>	Enable the ospf context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf</a>
<b>Tree</b>	<a href="#">ospf</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## instance [name](#) *string*

<b>Description</b>	List of OSPF protocol instances associated with this network-instance. Only a single instance is supported for now
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	1

## name *string*

<b>Description</b>	The name of the OSPF instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## area [area-id](#)

<b>Description</b>	List of OSPF area
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area</a> <a href="#">area-id</a>



<b>Tree</b>	<a href="#">area</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**area-id**

<b>Description</b>	Enter the area-id context
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface** [interface-name string](#)

<b>Description</b>	List of OSPF interfaces
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**interface-name string**

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**neighbors**

<b>Description</b>	Enter the neighbors context
<b>Context</b>	<a href="#">network-instance name string protocols ospf instance name string area area-id interface interface-name string neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all of the adjacencies on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">area area-id</a> <a href="#">interface interface-name</a> <i>string</i> <a href="#">neighbors clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## ldp-synchronization

<b>Description</b>	Enter the ldp-synchronization context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ldp-synchronization</a>
<b>Tree</b>	<a href="#">ldp-synchronization</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## exit

<b>Description</b>	Advertise the normal metric for all OSPF interfaces, even if some are configured for LDP synchronization and OSPF is not in sync with LDP on these interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">ldp-synchronization exit</a>
<b>Tree</b>	<a href="#">exit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## link-state-database

<b>Description</b>	The OSPF link state database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">link-state-database</a>
<b>Tree</b>	<a href="#">link-state-database</a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Clear the contents of the LSDB.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">link-state-database clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## manual-spf

<b>Description</b>	Enter the manual-spf context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">manual-spf</a>
<b>Tree</b>	<a href="#">manual-spf</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## run

<b>Description</b>	Run a SPF calculation.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">manual-spf run</a>
<b>Tree</b>	<a href="#">run</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## neighbors

<b>Description</b>	Container for OSPF neighbors tools
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">neighbors</a>
<b>Tree</b>	<a href="#">neighbors</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Clear all OSPF neighbors
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">neighbors clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## neighbor [neighbor-id](#)

<b>Description</b>	Enter the neighbor list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">neighbors neighbor neighbor-id</a>
<b>Tree</b>	<a href="#">neighbor</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## neighbor-id

<b>Description</b>	The neighbor's ip-address in case of OSPFv2, the router-id otherwise
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">neighbors neighbor neighbor-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset this neighbor in the OSPF instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">neighbors neighbor neighbor-id clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## overload

<b>Description</b>	Enter the overload context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload</a>
<b>Tree</b>	<a href="#">overload</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset OSPF instance overload status.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">overload</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Reset all of the OSPF instance statistics to zero.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols ospf instance name</a> <i>string</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## pim

<b>Description</b>	Enable the pim context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim</a>
<b>Tree</b>	<a href="#">pim</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## database

<b>Description</b>	Enter the database context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database</a>
<b>Tree</b>	<a href="#">database</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group [group](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group</a> <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group</a> <a href="#">group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all PIM instance database entries for this group
<b>Context</b>	<a href="#">network-instance name string protocols pim database group group (ipv4-address   ipv6-address) clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface [interface-name string](#)**

<b>Description</b>	List of PIM interfaces
<b>Context</b>	<a href="#">network-instance name string protocols pim database group group (ipv4-address   ipv6-address) interface interface-name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name [string](#)**

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string protocols pim database group group (ipv4-address   ipv6-address) interface interface-name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all PIM database entries for this multicast group on the interface
<b>Context</b>	<a href="#">network-instance name string protocols pim database group group (ipv4-address   ipv6-address) interface interface-name string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source [source](#) (*ipv4-address* | *ipv6-address*)

**Description** Source addresses

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address* | *ipv6-address*) [source source](#) (*ipv4-address* | *ipv6-address*)

**Tree** [source](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source (*ipv4-address* | *ipv6-address*)

**Description** Source address

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address* | *ipv6-address*) [source source](#) (*ipv4-address* | *ipv6-address*)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

**Description** Clear all PIM database entries for this source

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address* | *ipv6-address*) [source source](#) (*ipv4-address* | *ipv6-address*) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface [interface-name](#) *string*

**Description** List of PIM interfaces

**Context** [network-instance name](#) *string* [protocols pim database group group](#) (*ipv4-address* | *ipv6-address*) [source source](#) (*ipv4-address* | *ipv6-address*) [interface interface-name](#) *string*

**Tree** [interface](#)



<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface-name *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

<b>Description</b>	Clear all PIM database entries for this group and source on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">source source</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">interface interface-name</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### interface [interface-name](#) *string*

<b>Description</b>	List of PIM interfaces
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database interface interface-name</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database interface interface-name</a> <i>string</i>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4**

<b>Description</b>	IPv4 specific database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database interface interface-name</a> <i>string</i> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear the PIM database
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database interface interface-name</a> <i>string</i> <a href="#">ipv4 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv6**

<b>Description</b>	IPv6 specific statistics
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim database interface interface-name</a> <i>string</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True

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**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM database

**Context** [network-instance name](#) *string* [protocols pim database interface interface-name](#) *string* [ipv6 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

**Description** IPv4 multicast database tools

**Context** [network-instance name](#) *string* [protocols pim database ipv4](#)

**Tree** [ipv4](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM instance database

**Context** [network-instance name](#) *string* [protocols pim database ipv4 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

**Description** IPv6 multicast database tools

**Context** [network-instance name](#) *string* [protocols pim database ipv6](#)

**Tree** [ipv6](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM instance database

**Context** [network-instance name](#) *string* [protocols pim database ipv6 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## neighbor

**Description** Clear PIM neighbors by disabling pim adjacency messages

**Context** [network-instance name](#) *string* [protocols pim neighbor](#)

**Tree** [neighbor](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface [interface-name](#) *string*

**Description** List of PIM interfaces

**Context** [network-instance name](#) *string* [protocols pim neighbor interface interface-name](#) *string*

**Tree** [interface](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface-name *string*

**Description** Reference to a specific subinterface of the form <interface-name>.<subinterface-index>

**Context** [network-instance name](#) *string* [protocols pim neighbor interface interface-name](#) *string*

**String Length** 5 to 25

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	Clear IPv4 specific adjacency on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor interface interface-name</a> <i>string</i> <a href="#">ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the PIM adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor interface interface-name</a> <i>string</i> <a href="#">ipv4 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Clear IPv6 specific adjacency on this interface
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor interface interface-name</a> <i>string</i> <a href="#">ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the PIM adjacency
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor interface interface-name</a> <i>string</i> <a href="#">ipv6 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

<b>Description</b>	Clear all IPv4 pin adjacency on the system
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the PIM adjacency
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor ipv4 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

<b>Description</b>	Clear all IPv6 pin adjacency on the systems
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor ipv6</a>
<b>Tree</b>	<a href="#">ipv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear the PIM adjacency
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<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim neighbor ipv6 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group [group](#) (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim statistics group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">group</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## group (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Multicast group address
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">protocols pim statistics group group</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear all PIM statistics for this group
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<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim statistics group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** [source](#) ([ipv4-address](#) | [ipv6-address](#))

<b>Description</b>	Source addresses.
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim statistics group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> )
<b>Tree</b>	<a href="#">source</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source** ([ipv4-address](#) | [ipv6-address](#))

<b>Description</b>	Source address
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim statistics group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> )
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear**

<b>Description</b>	Clear all PIM statistics for this group and source
<b>Context</b>	<a href="#">network-instance name</a> <a href="#">string</a> <a href="#">protocols pim statistics group group</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">source source</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**interface** *interface-name string*

<b>Description</b>	List of PIM interfaces
<b>Context</b>	<a href="#">network-instance name string protocols pim statistics interface interface-name string</a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface-name** *string*

<b>Description</b>	Reference to a specific subinterface of the form <interface-name>.<subinterface-index>
<b>Context</b>	<a href="#">network-instance name string protocols pim statistics interface interface-name string</a>
<b>String Length</b>	5 to 25
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ipv4**

<b>Description</b>	IPv4 multicast PDU statistics
<b>Context</b>	<a href="#">network-instance name string protocols pim statistics interface interface-name string ipv4</a>
<b>Tree</b>	<a href="#">ipv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear the PIM statistics.
<b>Context</b>	<a href="#">network-instance name string protocols pim statistics interface interface-name string ipv4 clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

**Description** IPv6 multicast PDU statistics

**Context** [network-instance name](#) *string* [protocols pim statistics interface interface-name](#) *string* [ipv6](#)

**Tree** [ipv6](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM statistics.

**Context** [network-instance name](#) *string* [protocols pim statistics interface interface-name](#) *string* [ipv6 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4

**Description** IPv4 multicast PDU statistics

**Context** [network-instance name](#) *string* [protocols pim statistics ipv4](#)

**Tree** [ipv4](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM statistics

**Context** [network-instance name](#) *string* [protocols pim statistics ipv4 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6

**Description** IPv6 multicast PDU statistics

**Context** [network-instance name](#) *string* [protocols pim statistics ipv6](#)

**Tree** [ipv6](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear the PIM statistics

**Context** [network-instance name](#) *string* [protocols pim statistics ipv6 clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## route-table

**Description** Enable the route-table context

**Context** [network-instance name](#) *string* [route-table](#)

**Tree** [route-table](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-unicast

**Description** The container for the IPv4 unicast routing table of the network instance.

**Context** [network-instance name](#) *string* [route-table ipv4-unicast](#)

**Tree** [ipv4-unicast](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## longest-prefix-match

**Description** Enter the longest-prefix-match context

**Context** [network-instance name](#) *string* [route-table](#) [ipv4-unicast](#) [longest-prefix-match](#)

**Tree** [longest-prefix-match](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv4-address *string*

**Description** The IPv4 address for which the longest prefix match route should be returned

**Context** [network-instance name](#) *string* [route-table](#) [ipv4-unicast](#) [longest-prefix-match](#) [ipv4-address](#) *string*

**Tree** [ipv4-address](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-unicast

**Description** The container for the IPv6 unicast routing table of the network instance.

**Context** [network-instance name](#) *string* [route-table](#) [ipv6-unicast](#)

**Tree** [ipv6-unicast](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## longest-prefix-match

<b>Description</b>	Enter the longest-prefix-match context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">longest-prefix-match</a>
<b>Tree</b>	<a href="#">longest-prefix-match</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ipv6-address *string*

<b>Description</b>	The IPv6 address for which the longest prefix match route should be returned
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">route-table</a> <a href="#">ipv6-unicast</a> <a href="#">longest-prefix-match</a> <a href="#">ipv6-address</a> <i>string</i>
<b>Tree</b>	<a href="#">ipv6-address</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## traffic-engineering-policies

<b>Description</b>	Enter the traffic-engineering-policies context
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a>
<b>Tree</b>	<a href="#">traffic-engineering-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy [policy-name](#) *string*

<b>Description</b>	List of traffic engineering policies
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies</a> <a href="#">policy</a> <a href="#">policy-name</a> <i>string</i>
<b>Tree</b>	<a href="#">policy</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### policy-name *string*

<b>Description</b>	The name of the traffic engineering policy
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-list [segment-list-index](#) *number*

<b>Description</b>	Enter the segment-list list instance
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### segment-list-index *number*

<b>Description</b>	Index to enumerate the different segment lists of a TE policy.
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy</a> <a href="#">policy-name</a> <i>string</i> <a href="#">segment-list</a> <a href="#">segment-list-index</a> <i>number</i>
<b>Range</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

<b>Description</b>	Clear segment-list
--------------------	--------------------

---

<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## resignal

<b>Description</b>	Trigger resignal for segment-list
<b>Context</b>	<a href="#">network-instance name</a> <i>string</i> <a href="#">traffic-engineering-policies policy policy-name</a> <i>string</i> <a href="#">segment-list segment-list-index</a> <i>number</i> <a href="#">resignal</a>
<b>Tree</b>	<a href="#">resignal</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 16 tools oam

```

oam
+ ethcfm
+ clear-cfm-statistics
+ delete-auto-discovered-meps
+ delete-learned-remote-macs
+ domain domain-id string
+ association association-id string
+ delete-auto-discovered-meps
+ delete-learned-remote-macs
+ mep mep-id number
+ clear-cfm-statistics
+ delete-learned-remote-macs
+ on-demand
+ linktrace
+ target (unicast-mac-address | number)
+ ttl number
+ loopback
+ data-tlv-size number
+ priority number
+ target (unicast-mac-address | number | keyword)
+ remote-mep remote-mep-id number
+ delete-auto-discovered-meps
+ delete-learned-remote-macs
+ terminate-active-test keyword
+ delete-auto-discovered-meps
+ delete-learned-remote-macs
+ lsp-ping
+ ldp
+ clear
+ fec prefix (ipv4-prefix | ipv6-prefix)
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ interval number
+ mpls-ttl number
+ probe-size number
+ send-count number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ sr-isis
+ clear
+ prefix-sid prefix (ipv4-prefix | ipv6-prefix)
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ igp-instance number
+ interval number
+ mpls-ttl number
+ probe-size number
+ send-count number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ te-policy
+ sr-uncolored

```



```

+ clear
+ policy policy-name string protocol-origin keyword
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ interval number
+ mpls-ttl number
+ probe-size number
+ segment-list-index number
+ send-count number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ lsp-trace
+ ldp
+ clear
+ fec prefix (ipv4-prefix | ipv6-prefix)
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ interval number
+ maximum-failures number
+ maximum-mpls-ttl number
+ minimum-mpls-ttl number
+ probe-count number
+ probe-size number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ sr-isis
+ clear
+ prefix-sid prefix (ipv4-prefix | ipv6-prefix)
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ igp-instance number
+ interval number
+ maximum-failures number
+ maximum-mpls-ttl number
+ minimum-mpls-ttl number
+ probe-count number
+ probe-size number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ te-policy
+ sr-uncolored
+ clear
+ policy policy-name string protocol-origin keyword
+ destination-ip (ipv4-address | ipv6-address)
+ ecmp-interface-select string
+ ecmp-next-hop-select (ipv4-address | ipv6-address)
+ interval number
+ maximum-failures number
+ maximum-mpls-ttl number
+ minimum-mpls-ttl number
+ probe-count number
+ probe-size number
+ segment-list-index number
+ source-ip (ipv4-address | ipv6-address)
+ timeout number
+ traffic-class number
+ performance-monitoring
+ ethcfm

```

```
+ session session-name string
  + clear
  + on-demand-action keyword
+ ip
  + session session-name string
  + clear
  + on-demand-action keyword
+ service-activation-testhead
  + service-test test-name string
  + start
  + stop
+ twamp
  + server
  + network-instance name string
  + clear
```

## 16.1 oam Descriptions

### oam

<b>Description</b>	Enclosing container for OAM management.
<b>Context</b>	<a href="#">oam</a>
<b>Tree</b>	<a href="#">oam</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### ethcfm

<b>Description</b>	Enter ETH-CFM on-demand tools
<b>Context</b>	<a href="#">oam ethcfm</a>
<b>Tree</b>	<a href="#">ethcfm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-cfm-statistics

<b>Description</b>	<p>Clears ETH-CFM statistics</p> <p>This clears the statistics at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all ETH-CFM system statistics are cleared. If the command is issued at the ethcfm domain association local-mep those individual mep OpCode statistics will be cleared.</p>
<b>Context</b>	<a href="#">oam ethcfm clear-cfm-statistics</a>
<b>Tree</b>	<a href="#">clear-cfm-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-auto-discovered-meps

<b>Description</b>	<p>Delete discovered meps from the remote mep database</p> <p>This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are</p>
--------------------	---

deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be deleted.

<b>Context</b>	<a href="#">oam ethcfm delete-auto-discovered-meps</a>
<b>Tree</b>	<a href="#">delete-auto-discovered-meps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-learned-remote-macs

<b>Description</b>	Delete learned remote macs from the mep mac table  This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be delete.
<b>Context</b>	<a href="#">oam ethcfm delete-learned-remote-macs</a>
<b>Tree</b>	<a href="#">delete-learned-remote-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### domain [domain-id string](#)

<b>Description</b>	Enter the domain list instance
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>Tree</b>	<a href="#">domain</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### domain-id [string](#)

<b>Description</b>	Enter the domain-id context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association** [association-id string](#)

<b>Description</b>	Enter the association list instance
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>Tree</b>	<a href="#">association</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**association-id string**

<b>Description</b>	Enter the association-id context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delete-auto-discovered-meps**

<b>Description</b>	Delete discovered meps from the remote mep database  This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be deleted.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string delete-auto-discovered-meps</a>
<b>Tree</b>	<a href="#">delete-auto-discovered-meps</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**delete-learned-remote-macs**

<b>Description</b>	Delete learned remote macs from the mep mac table  This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be delete.
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<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string delete-learned-remote-macs</a>
<b>Tree</b>	<a href="#">delete-learned-remote-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mep [mep-id number](#)

<b>Description</b>	Enter the mep list instance
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number</a>
<b>Tree</b>	<a href="#">mep</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### mep-id [number](#)

<b>Description</b>	Enter the mep-id context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear-cfm-statistics

<b>Description</b>	<p>Clears ETH-CFM statistics</p> <p>This clears the statistics at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all ETH-CFM system statistics are cleared. If the command is issued at the ethcfm domain association local-mep those individual mep OpCode statistics will be cleared.</p>
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number clear-cfm-statistics</a>
<b>Tree</b>	<a href="#">clear-cfm-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## delete-learned-remote-macs

<b>Description</b>	Delete learned remote macs from the mep mac table  This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be delete.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number delete-learned-remote-macs</a>
<b>Tree</b>	<a href="#">delete-learned-remote-macs</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## on-demand

<b>Description</b>	Enter Eth-CFM tests context
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand</a>
<b>Tree</b>	<a href="#">on-demand</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## linktrace

<b>Description</b>	Perform an Eth-CFM linktrace test
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand linktrace</a>
<b>Tree</b>	<a href="#">linktrace</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## target (*unicast-mac-address* | *number*)

<b>Description</b>	Target MAC address or MEP ID for the test.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand linktrace target (<i>unicast-mac-address</i>   <i>number</i>)</a>

<b>Tree</b>	<a href="#">target</a>
<b>Range</b>	1 to 8191
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ttl** *number*

<b>Description</b>	Time to live value encoded into the CFM PDU
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand linktrace ttl number</a>
<b>Tree</b>	<a href="#">ttl</a>
<b>Range</b>	0 to 255
<b>Default</b>	64
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**loopback**

<b>Description</b>	Perform an Eth-CFM loopback test
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand loopback</a>
<b>Tree</b>	<a href="#">loopback</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**data-tlv-size** *number*

<b>Description</b>	The Data TLV byte count for a LBM test
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand loopback data-tlv-size number</a>
<b>Tree</b>	<a href="#">data-tlv-size</a>
<b>Range</b>	0   3 to 9502
<b>Default</b>	0
<b>Units</b>	bytes



<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### priority *number*

<b>Description</b>	The dot1p priority to be used in the transmitted LBM test packet
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand loopback priority number</a>
<b>Tree</b>	<a href="#">priority</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### target (*unicast-mac-address | number | keyword*)

<b>Description</b>	Target MAC address or MEP ID or multicast keyword for the test The multicast enumeration will be replaced with a Class 1 MAC address in the form 01:80:c2:00:00:3x. Where x = the domain level.
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number on-demand loopback target (unicast-mac-address   number   keyword)</a>
<b>Tree</b>	<a href="#">target</a>
<b>Range</b>	1 to 8191
<b>Options</b>	<ul style="list-style-type: none"> <li>multicast</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mep [remote-mep-id number](#)

<b>Description</b>	Remote MEP ID from the remote MEP database
<b>Context</b>	<a href="#">oam ethcfm domain domain-id string association association-id string mep mep-id number remote-mep remote-mep-id number</a>
<b>Tree</b>	<a href="#">remote-mep</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### remote-mep-id *number*

**Description** Enter the remote-mep-id context

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id number remote-mep remote-mep-id number](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-auto-discovered-meps

**Description** Delete discovered meps from the remote mep database

This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be deleted.

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id number remote-mep remote-mep-id number delete-auto-discovered-meps](#)

**Tree** [delete-auto-discovered-meps](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-learned-remote-macs

**Description** Delete learned remote macs from the mep mac table

This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be delete.

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id number remote-mep remote-mep-id number delete-learned-remote-macs](#)

**Tree** [delete-learned-remote-macs](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### terminate-active-test *keyword*

**Description** Enter the terminate-active-test context

**Context** [oam ethcfm domain domain-id string association association-id string mep mep-id number terminate-active-test keyword](#)

**Tree** [terminate-active-test](#)

**Options**

- loopback
- linktrace

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-auto-discovered-meps

**Description** Delete discovered meps from the remote mep database

This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be deleted.

**Context** [oam ethcfm domain domain-id string delete-auto-discovered-meps](#)

**Tree** [delete-auto-discovered-meps](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### delete-learned-remote-macs

**Description** Delete learned remote macs from the mep mac table

This deletes the entries at the relative hierarchy to the command instance. For example, if the command is issued directly under ethcfm all entries are deleted. If the command is issued at the ethcfm domain association local-mep remote-mep that specific entry will be delete.

**Context** [oam ethcfm domain domain-id string delete-learned-remote-macs](#)

**Tree** [delete-learned-remote-macs](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## Isp-ping

**Description** Initiate LSP ping of the remote endpoint of an MPLS or segment routing tunnel

**Context** [oam lsp-ping](#)

**Tree** [lsp-ping](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ldp

**Description** Parameters required to ping the endpoint of an LDP tunnel

**Context** [oam lsp-ping ldp](#)

**Tree** [ldp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear all LDP ping session transmit and receive packet counts and all error counts

**Context** [oam lsp-ping ldp clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec prefix (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the fec list instance

**Context** [oam lsp-ping ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Tree** [fec](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** The IPv4 or IPv6 prefix associated with the FEC  
This is the destination that is being pinged.

**Context** [oam lsp-ping ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** (*ipv4-address* | *ipv6-address*)

**Description** The destination IP address of the UDP/IP MPLS echo request message  
This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.

**Context** [oam lsp-ping ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [destination-ip](#) (*ipv4-address* | *ipv6-address*)

**Tree** [destination-ip](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-interface-select** *string*

**Description** Send the LSP ping messages out the specified subinterface  
If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically

**Context** [oam lsp-ping ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [ecmp-interface-select](#) *string*

**Tree** [ecmp-interface-select](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ecmp-next-hop-select** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Send the LSP ping messages to the specified next-hop If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">ecmp-next-hop-select</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ecmp-next-hop-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interval** *number*

<b>Description</b>	The time interval between successive MPLS echo-request messages in case of send-count > 1
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**mpls-ttl** *number*

<b>Description</b>	The TTL value written into the topmost label stack entry of the MPLS echo-request message  This TTL is expected to be decremented at each hop along the path to the destination. If TTL reaches 1 the segment routing packet will be discarded due to TTL expiry and the ping will fail if the destination has not been reached yet.
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">mpls-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	255
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-size *number*

**Description** The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any

**Context** [oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) probe-size number](#)

**Tree** [probe-size](#)

**Range** 1 to 9500

**Default** 1

**Units** bytes

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### send-count *number*

**Description** The number of MPLS echo-request messages to be sent in sequence

**Context** [oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) send-count number](#)

**Tree** [send-count](#)

**Range** 1 to 100

**Default** 1

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-ip (*ipv4-address* | *ipv6-address*)

**Description** The source IP address of the UDP/IP MPLS echo request message

This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.

**Context** [oam lsp-ping ldp fec prefix \(ipv4-prefix | ipv6-prefix\) source-ip \(ipv4-address | ipv6-address\)](#)

**Tree** [source-ip](#)

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout** *number*

<b>Description</b>	The maximum time the sender waits to receive an MPLS echo-reply message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>timeout number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-class** *number*

<b>Description</b>	MPLS Header Traffic Class/Exp value
<b>Context</b>	<a href="#">oam lsp-ping ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>traffic-class number</i>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**sr-isis**

<b>Description</b>	Parameters required to ping the endpoint of an SR-ISIS tunnel
<b>Context</b>	<a href="#">oam lsp-ping sr-isis</a>
<b>Tree</b>	<a href="#">sr-isis</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**clear**

<b>Description</b>	Clear all SR-ISIS ping session transmit and receive packet counts and all error counts
<b>Context</b>	<a href="#">oam lsp-ping sr-isis clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix-sid [prefix](#) ([ipv4-prefix](#) | [ipv6-prefix](#))**

<b>Description</b>	Enter the prefix-sid list instance
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

<b>Description</b>	The IPv4 or IPv6 prefix associated with the SID This is the destination that is being pinged.
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**destination-ip ([ipv4-address](#) | [ipv6-address](#))**

<b>Description</b>	The destination IP address of the UDP/IP MPLS echo request message This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">destination-ip</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> )
<b>Tree</b>	<a href="#">destination-ip</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-interface-select** *string*

<b>Description</b>	Send the LSP ping messages out the specified subinterface If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) ecmp-interface-select string</a>
<b>Tree</b>	<a href="#">ecmp-interface-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-next-hop-select** (*ipv4-address | ipv6-address*)

<b>Description</b>	Send the LSP ping messages to the specified next-hop If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) ecmp-next-hop-select (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">ecmp-next-hop-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **igp-instance** *number*

<b>Description</b>	ISIS instance id
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) igp-instance number</a>
<b>Tree</b>	<a href="#">igp-instance</a>
<b>Range</b>	0 to 255
<b>Default</b>	0
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval number**

**Description** The time interval between successive MPLS echo-request messages in case of send-count > 1

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) interval number](#)

**Tree** [interval](#)

**Range** 1 to 10

**Default** 1

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-ttl number**

**Description** The TTL value written into the topmost label stack entry of the MPLS echo-request message

This TTL is expected to be decremented at each hop along the path to the destination. If TTL reaches 1 the segment routing packet will be discarded due to TTL expiry and the ping will fail if the destination has not been reached yet.

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) mpls-ttl number](#)

**Tree** [mpls-ttl](#)

**Range** 1 to 255

**Default** 255

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **probe-size number**

**Description** The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any

**Context** [oam lsp-ping sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) probe-size number](#)

**Tree** [probe-size](#)

<b>Range</b>	1 to 9500
<b>Default</b>	1
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **send-count number**

<b>Description</b>	The number of MPLS echo-request messages to be sent in sequence
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) send-count number</a>
<b>Tree</b>	<a href="#">send-count</a>
<b>Range</b>	1 to 100
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-ip (ipv4-address | ipv6-address)**

<b>Description</b>	The source IP address of the UDP/IP MPLS echo request message  This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) source-ip (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **timeout number**

<b>Description</b>	The maximum time the sender waits to receive an MPLS echo-reply message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) timeout number</a>

<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### traffic-class *number*

<b>Description</b>	MPLS Header Traffic Class/Exp value
<b>Context</b>	<a href="#">oam lsp-ping sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) traffic-class number</a>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### te-policy

<b>Description</b>	Parameters required to ping the endpoint of a TE-Policy tunnel
<b>Context</b>	<a href="#">oam lsp-ping te-policy</a>
<b>Tree</b>	<a href="#">te-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-uncolored

<b>Description</b>	Enter the sr-uncolored context
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored</a>
<b>Tree</b>	<a href="#">sr-uncolored</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all uncolored MPLS TE-Policy ping session transmit and receive packet counts and all error counts
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy** [policy-name string protocol-origin keyword](#)

<b>Description</b>	Enter the policy list instance
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy-name string**

<b>Description</b>	Name of Uncolored Traffic Engineering Policy to be tested. ny available primary or standby or active secondaty candidate-path can be probed.
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**protocol-origin keyword**

<b>Description</b>	Uncolored Traffic Engineering Policy, origination source. The method Policy path is computed. This list includes Path Computation Engine, explicitly configured paths, etc.
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pcep</li> </ul>

- PCEP used as signalling mechanism for the candidate path
- bgp
  - BGP used as signalling mechanism for the candidate path
- local
  - Management interface used for candidate path instantiation

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The destination IP address of the UDP/IP MPLS echo request message This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword destination-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-interface-select** *string*

<b>Description</b>	Send the LSP ping messages out the specified subinterface If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name string protocol-origin keyword ecmp-interface-select string</a>
<b>Tree</b>	<a href="#">ecmp-interface-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-next-hop-select** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Send the LSP ping messages to the specified next-hop
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If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically

<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">ecmp-next-hop-select</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ecmp-next-hop-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval** *number*

<b>Description</b>	The time interval between successive MPLS echo-request messages in case of send-count > 1
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **mpls-ttl** *number*

<b>Description</b>	The TTL value written into the topmost label stack entry of the MPLS echo-request message  This TTL is expected to be decremented at each hop along the path to the destination. If TTL reaches 1 the segment routing packet will be discarded due to TTL expiry and the ping will fail if the destination has not been reached yet.
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">mpls-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS echo-request message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">probe-size</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	1
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**segment-list-index** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy active segment-list index
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list-index</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**send-count** *number*

<b>Description</b>	The number of MPLS echo-request messages to be sent in sequence
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin</a> <i>keyword</i> <a href="#">send-count</a> <i>number</i>
<b>Tree</b>	<a href="#">send-count</a>
<b>Range</b>	1 to 100
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source IP address of the UDP/IP MPLS echo request message  This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword source-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout** *number*

<b>Description</b>	The maximum time the sender waits to receive an MPLS echo-reply message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-class** *number*

<b>Description</b>	MPLS Header Traffic Class/Exp value
<b>Context</b>	<a href="#">oam lsp-ping te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword traffic-class</a> <i>number</i>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## Isp-trace

**Description** Perform LSP trace of the path towards the remote endpoint of an MPLS or segment routing tunnel

**Context** [oam lsp-trace](#)

**Tree** [lsp-trace](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ldp

**Description** Parameters required to trace a path towards the endpoint of an LDP tunnel

**Context** [oam lsp-trace ldp](#)

**Tree** [ldp](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear all LDP trace session transmit and receive packet counts and all error counts

**Context** [oam lsp-trace ldp clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fec prefix (*ipv4-prefix* | *ipv6-prefix*)

**Description** Enter the fec list instance

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Tree** [fec](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

**Description** The IPv4 or IPv6 prefix associated with the FEC  
This is the destination that is being traced.

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** (*ipv4-address* | *ipv6-address*)

**Description** The destination IP address of the UDP/IP MPLS trace message  
This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [destination-ip](#) (*ipv4-address* | *ipv6-address*)

**Tree** [destination-ip](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-interface-select** *string*

**Description** Send the LSP trace messages out the specified subinterface  
If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically

**Context** [oam lsp-trace ldp fec prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [ecmp-interface-select](#) *string*

**Tree** [ecmp-interface-select](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ecmp-next-hop-select** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Send the LSP trace messages to the specified next-hop If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">ecmp-next-hop-select</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ecmp-next-hop-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interval** *number*

<b>Description</b>	The time interval between successive MPLS trace messages while incrementing the TTL
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-failures** *number*

<b>Description</b>	The maximum number of consecutive MPLS trace requests that do not receive a reply before the trace operation fails for a given TTL
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">maximum-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-failures</a>
<b>Range</b>	1 to 255
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-mpls-ttl** *number*

<b>Description</b>	The maximum or final TTL value of the MPLS trace messages
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) maximum-mpls-ttl number</a>
<b>Tree</b>	<a href="#">maximum-mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	30
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-mpls-ttl** *number*

<b>Description</b>	The minimum or starting TTL value of the MPLS trace messages
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) minimum-mpls-ttl number</a>
<b>Tree</b>	<a href="#">minimum-mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-count** *number*

<b>Description</b>	The maximum number of MPLS trace messages sent per hop
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) probe-count number</a>
<b>Tree</b>	<a href="#">probe-count</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) probe-size</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	1
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**source-ip** (*ipv4-address | ipv6-address*)

<b>Description</b>	The source IP address of the UDP/IP MPLS trace message  This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) source-ip (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout** *number*

<b>Description</b>	The maximum time the sender waits to receive an MPLS trace message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-trace ldp fec prefix (ipv4-prefix   ipv6-prefix) timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### traffic-class *number*

**Description** MPLS Header Traffic Class/Exp value

**Context** [oam lsp-trace ldp fec prefix \(ipv4-prefix | ipv6-prefix\) traffic-class number](#)

**Tree** [traffic-class](#)

**Range** 0 to 7

**Default** 7

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### sr-isis

**Description** Parameters required to trace a path towards the endpoint of an SR-ISIS tunnel

**Context** [oam lsp-trace sr-isis](#)

**Tree** [sr-isis](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

**Description** Clear all SR-ISIS trace session transmit and receive packet counts and all error counts

**Context** [oam lsp-trace sr-isis clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### prefix-sid [prefix \(ipv4-prefix | ipv6-prefix\)](#)

**Description** Enter the prefix-sid list instance

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\)](#)



<b>Tree</b>	<a href="#">prefix-sid</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

<b>Description</b>	The IPv4 or IPv6 prefix associated with the SID This is the destination that is being traced.
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **destination-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The destination IP address of the UDP/IP MPLS trace message This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">destination-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-interface-select** *string*

<b>Description</b>	Send the LSP trace messages out the specified subinterface If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">ecmp-interface-select</a> <i>string</i>
<b>Tree</b>	<a href="#">ecmp-interface-select</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-next-hop-select** (*ipv4-address* | *ipv6-address*)

**Description** Send the LSP trace messages to the specified next-hop  
If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically

**Context** [oam lsp-trace sr-isis prefix-sid prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [ecmp-next-hop-select](#) (*ipv4-address* | *ipv6-address*)

**Tree** [ecmp-next-hop-select](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **igp-instance** *number*

**Description** ISIS instance id

**Context** [oam lsp-trace sr-isis prefix-sid prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [igp-instance](#) *number*

**Tree** [igp-instance](#)

**Range** 0 to 255

**Default** 0

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval** *number*

**Description** The time interval between successive MPLS trace messages while incrementing the TTL

**Context** [oam lsp-trace sr-isis prefix-sid prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [interval](#) *number*

**Tree** [interval](#)

**Range** 1 to 10

**Default** 1

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-failures *number*

**Description** The maximum number of consecutive MPLS trace requests that do not receive a reply before the trace operation fails for a given TTL

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) maximum-failures number](#)

**Tree** [maximum-failures](#)

**Range** 1 to 255

**Default** 5

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### maximum-mpls-ttl *number*

**Description** The maximum or final TTL value of the MPLS trace messages

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) maximum-mpls-ttl number](#)

**Tree** [maximum-mpls-ttl](#)

**Range** 1 to 255

**Default** 30

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### minimum-mpls-ttl *number*

**Description** The minimum or starting TTL value of the MPLS trace messages

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) minimum-mpls-ttl number](#)

**Tree** [minimum-mpls-ttl](#)

**Range** 1 to 255

**Default** 1

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-count *number*

**Description** The maximum number of MPLS trace messages sent per hop

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) probe-count number](#)

**Tree** [probe-count](#)

**Range** 1 to 10

**Default** 1

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### probe-size *number*

**Description** The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) probe-size number](#)

**Tree** [probe-size](#)

**Range** 1 to 9500

**Default** 1

**Units** bytes

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### source-ip (*ipv4-address* | *ipv6-address*)

**Description** The source IP address of the UDP/IP MPLS trace message

This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.

**Context** [oam lsp-trace sr-isis prefix-sid prefix \(ipv4-prefix | ipv6-prefix\) source-ip \(ipv4-address | ipv6-address\)](#)

<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout number**

<b>Description</b>	The maximum time the sender waits to receive an MPLS trace message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) timeout number</a>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-class number**

<b>Description</b>	MPLS Header Traffic Class/Exp value
<b>Context</b>	<a href="#">oam lsp-trace sr-isis prefix-sid prefix (ipv4-prefix   ipv6-prefix) traffic-class number</a>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**te-policy**

<b>Description</b>	Parameters required to trace the endpoint of a TE-Policy tunnel
<b>Context</b>	<a href="#">oam lsp-trace te-policy</a>
<b>Tree</b>	<a href="#">te-policy</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## sr-uncolored

**Description** Enter the sr-uncolored context

**Context** [oam lsp-trace te-policy sr-uncolored](#)

**Tree** [sr-uncolored](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clear all uncolored MPLS TE-Policy trace session transmit and receive packet counts and all error counts

**Context** [oam lsp-trace te-policy sr-uncolored clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy [policy-name](#) *string* [protocol-origin](#) *keyword*

**Description** Enter the policy list instance

**Context** [oam lsp-trace te-policy sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword*

**Tree** [policy](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## policy-name *string*

**Description** Name of Uncolored Traffic Engineering Policy which is to be traced. Any available primary or standby or active secondary candidate-path can be traced.

**Context** [oam lsp-trace te-policy sr-uncolored policy policy-name](#) *string* [protocol-origin](#) *keyword*

<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### protocol-origin *keyword*

<b>Description</b>	Uncolored Traffic Engineering Policy, origination source. The method Policy path is computed. This list includes Path Computation Engine, explicitly configured paths, etc.
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• pcep PCEP used as signalling mechanism for the candidate path</li> <li>• bgp BGP used as signalling mechanism for the candidate path</li> <li>• local Management interface used for candidate path instantiation</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### destination-ip (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The destination IP address of the UDP/IP MPLS trace message This should be a non-forwardable address in the 127/8 address block (or the 0:0:0:0:FFFF:7F00:0/104 IPv6 address block). Varying this address can help to exercise different ECMP paths towards the destination. By default, the destination address is selected randomly from these address blocks.
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin <i>keyword</i> destination-ip ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">destination-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ecmp-interface-select *string*

<b>Description</b>	Send the LSP trace messages out the specified subinterface
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If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those subinterfaces specifically

<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword ecmp-interface-select</a> <i>string</i>
<b>Tree</b>	<a href="#">ecmp-interface-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **ecmp-next-hop-select** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	Send the LSP trace messages to the specified next-hop If this router has multiple ECMP next-hops to the endpoint of the MPLS tunnel this can select one of those next-hops specifically
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword ecmp-next-hop-select</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ecmp-next-hop-select</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **interval** *number*

<b>Description</b>	The time interval between successive MPLS trace messages while incrementing the TTL
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword interval</a> <i>number</i>
<b>Tree</b>	<a href="#">interval</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **maximum-failures** *number*

<b>Description</b>	The maximum number of consecutive MPLS trace requests that do not receive a reply before the trace operation fails for a given TTL
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<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">maximum-failures</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-failures</a>
<b>Range</b>	1 to 255
<b>Default</b>	5
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**maximum-mpls-ttl** *number*

<b>Description</b>	The maximum or final TTL value of the MPLS trace messages
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">maximum-mpls-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	30
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**minimum-mpls-ttl** *number*

<b>Description</b>	The minimum or starting TTL value of the MPLS trace messages
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">minimum-mpls-ttl</a> <i>number</i>
<b>Tree</b>	<a href="#">minimum-mpls-ttl</a>
<b>Range</b>	1 to 255
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**probe-count** *number*

<b>Description</b>	The maximum number of MPLS trace messages sent per hop
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">probe-count</a> <i>number</i>

<b>Tree</b>	<a href="#">probe-count</a>
<b>Range</b>	1 to 10
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **probe-size** *number*

<b>Description</b>	The size of the IP packet MPLS trace message. Probe size does not include MPLS headers, if any
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword probe-size</a> <i>number</i>
<b>Tree</b>	<a href="#">probe-size</a>
<b>Range</b>	1 to 9500
<b>Default</b>	1
<b>Units</b>	bytes
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **segment-list-index** *number*

<b>Description</b>	Uncolored Traffic Engineering Policy active segment-list index
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> <a href="#">protocol-origin keyword segment-list-index</a> <i>number</i>
<b>Tree</b>	<a href="#">segment-list-index</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **source-ip** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The source IP address of the UDP/IP MPLS trace message  This should be a routable address of the router. This will be destination of the MPLS echo reply message sent back to the sender. By default this is the system address of the default network-instance; if the default network-instance does not have system interface then it will be primary address of the lowest numbered loopback subinterface of the default network-instance.
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<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">source-ip</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">source-ip</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**timeout** *number*

<b>Description</b>	The maximum time the sender waits to receive an MPLS trace message before considering that the ping failed
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">timeout</a> <i>number</i>
<b>Tree</b>	<a href="#">timeout</a>
<b>Range</b>	1 to 60
<b>Default</b>	3
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**traffic-class** *number*

<b>Description</b>	MPLS Header Traffic Class/Exp value
<b>Context</b>	<a href="#">oam lsp-trace te-policy sr-uncolored policy policy-name</a> <i>string</i> protocol-origin keyword <a href="#">traffic-class</a> <i>number</i>
<b>Tree</b>	<a href="#">traffic-class</a>
<b>Range</b>	0 to 7
<b>Default</b>	7
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**performance-monitoring**

<b>Description</b>	OAM Performance Monitoring
<b>Context</b>	<a href="#">oam performance-monitoring</a>

<b>Tree</b>	<a href="#">performance-monitoring</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ethcfm

<b>Description</b>	OAM-PM ETH-CFM on-demand tools
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm</a>
<b>Tree</b>	<a href="#">ethcfm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## session [session-name string](#)

<b>Description</b>	Enter the session list instance
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string</a>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## session-name [string](#)

<b>Description</b>	Enter the session-name context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">oam performance-monitoring ethcfm session session-name string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### on-demand-action *keyword*

**Description** Action required to start and stop an OAM-PM on-demand session

**Context** [oam performance-monitoring ethcfm session session-name string on-demand-action keyword](#)

**Tree** [on-demand-action](#)

**Options**

- start
- stop

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### ip

**Description** OAM-PM IP on-demand tools

**Context** [oam performance-monitoring ip](#)

**Tree** [ip](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session [session-name string](#)

**Description** Enter the session list instance

**Context** [oam performance-monitoring ip session session-name string](#)

**Tree** [session](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-name *string*

**Description** Enter the session-name context

**Context** [oam performance-monitoring ip session session-name string](#)

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**on-demand-action *keyword***

<b>Description</b>	Action required to start and stop an OAM-PM on-demand session
<b>Context</b>	<a href="#">oam performance-monitoring ip session session-name string on-demand-action keyword</a>
<b>Tree</b>	<a href="#">on-demand-action</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• start</li> <li>• stop</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**service-activation-testhead**

<b>Description</b>	Enter the service-activation-testhead context
<b>Context</b>	<a href="#">oam service-activation-testhead</a>
<b>Tree</b>	<a href="#">service-activation-testhead</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**service-test *test-name string***

<b>Description</b>	Enter the service-test list instance
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name string</a>

<b>Tree</b>	<a href="#">service-test</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**test-name** *string*

<b>Description</b>	Enter the test-name context
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**start**

<b>Description</b>	starts a new run of the service test with given test name
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <b>start</b>
<b>Tree</b>	<a href="#">start</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**stop**

<b>Description</b>	stops the current run of the service test with given test name
<b>Context</b>	<a href="#">oam service-activation-testhead service-test test-name</a> <i>string</i> <b>stop</b>
<b>Tree</b>	<a href="#">stop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**twamp**

<b>Description</b>	Enable the twamp context
<b>Context</b>	<a href="#">oam twamp</a>
<b>Tree</b>	<a href="#">twamp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**server**

<b>Description</b>	Enter the server context
<b>Context</b>	<a href="#">oam twamp server</a>
<b>Tree</b>	<a href="#">server</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**network-instance** [name](#) *string*

<b>Description</b>	Enter the network-instance list instance
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>string</i>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**name** *string*

<b>Description</b>	Enter the name context
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear all TWAMP test session transmit and receive packet counts and all error counts
<b>Context</b>	<a href="#">oam twamp server network-instance name</a> <i>string</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## 17 tools platform

```
platform
+ chassis
  + reboot
    + cancel
    + delay number
    + force
    + message string
    + warm
      + force
      + validate
  + control slot string
    + locator
      + disable
      + enable
      + duration number
    + reboot
      + cancel
      + delay number
      + force
      + message string
  + fabric slot number
    + locator
      + disable
      + enable
      + duration number
    + reboot
      + cancel
      + delay number
      + message string
  + fan-tray id number
    + locator
      + disable
      + enable
      + duration number
  + linecard slot number
    + locator
      + disable
      + enable
      + duration number
    + reboot
      + cancel
      + delay number
      + message string
  + redundancy
  + switchover
  + synchronize
    + overlay
    + system
  + show-fabric-bandwidth
  + trust
    + attestation
      + control slot string
        + log-retrieval
          + bios
            + display
              + from number
```

```
    + pcr number
    + to number
  + summary
+ ima
  + display
    + from number
    + pcr number
    + to number
    + summary
+ pcr-quote
  + nonce binary
  + pcr-selection string
+ pcr-read
  + pcr-selection string
+ disk-encryption
+ control slot string
  + activate
+ secure-boot
  + control slot string
  + activate
    + confirmation-code string
    + serial-number string
  + revoke
    + confirmation-code string
    + serial-number string
  + update
    + confirmation-code string
    + serial-number string
```

## 17.1 platform Descriptions

### platform

<b>Description</b>	Top-level container for platform operational commands
<b>Context</b>	<a href="#">platform</a>
<b>Tree</b>	<a href="#">platform</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### chassis

<b>Description</b>	Operational commands related to the chassis
<b>Context</b>	<a href="#">platform chassis</a>
<b>Tree</b>	<a href="#">chassis</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### reboot

<b>Description</b>	Trigger a reboot of the chassis
<b>Context</b>	<a href="#">platform chassis reboot</a>
<b>Tree</b>	<a href="#">reboot</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### cancel

<b>Description</b>	Cancels a pending reboot on this component
<b>Context</b>	<a href="#">platform chassis reboot cancel</a>
<b>Tree</b>	<a href="#">cancel</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **delay** *number*

<b>Description</b>	The amount of time to delay the reboot During this period, the reboot can be cancelled.
<b>Context</b>	<a href="#">platform chassis reboot delay</a> <i>number</i>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **force**

<b>Description</b>	Force a reboot of this component, overriding any synchronizations or other activities in progress  This option can be dangerous, and may result in a module booting on an older image if used after an image change
<b>Context</b>	<a href="#">platform chassis reboot force</a>
<b>Tree</b>	<a href="#">force</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **message** *string*

<b>Description</b>	A user-defined message to broadcast to other users of the system
<b>Context</b>	<a href="#">platform chassis reboot message</a> <i>string</i>
<b>Tree</b>	<a href="#">message</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## **warm**

<b>Description</b>	Perform a warm reboot of the system  This option will perform checks against the current configuration, before prompting to confirm the reboot, and then rebooting the system without impacting the datapath - if a new image has been configured, this will upgrade the system.
<b>Context</b>	<a href="#">platform chassis reboot warm</a>

<b>Tree</b>	<a href="#">warm</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

## force

<b>Description</b>	Force a warm reboot of the system, overriding any validation, synchronizations or other activities in progress  This option can be dangerous, and may result in an outage - but can be used to support a fast reboot of the system.
<b>Context</b>	<a href="#">platform chassis reboot warm force</a>
<b>Tree</b>	<a href="#">force</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

## validate

<b>Description</b>	Validate that the system's current configuration and state supports a warm reboot operation
<b>Context</b>	<a href="#">platform chassis reboot warm validate</a>
<b>Tree</b>	<a href="#">validate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

## control *slot string*

<b>Description</b>	Operational commands related to control modules
<b>Context</b>	<a href="#">platform control slot <i>string</i></a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## slot *string*

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">platform control slot <i>string</i></a>

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## locator

<b>Description</b>	Operational commands for the locator LED
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">locator</a>
<b>Tree</b>	<a href="#">locator</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## disable

<b>Description</b>	Deactivates the locator LED for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">locator</a> <a href="#">disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## enable

<b>Description</b>	Activate the locator LED for this component
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">locator</a> <a href="#">enable</a>
<b>Tree</b>	<a href="#">enable</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## duration *number*

<b>Description</b>	Sets the duration to activate the locator LED, after which it will disable automatically
<b>Context</b>	<a href="#">platform control slot</a> <i>string</i> <a href="#">locator</a> <a href="#">enable</a> <a href="#">duration</a> <i>number</i>
<b>Tree</b>	<a href="#">duration</a>
<b>Range</b>	10 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True

**Platforms** Supported on all platforms

## reboot

**Description** Trigger or a reboot of this component

**Context** [platform control slot](#) *string* [reboot](#)

**Tree** [reboot](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## cancel

**Description** Cancels a pending reboot on this component

**Context** [platform control slot](#) *string* [reboot](#) [cancel](#)

**Tree** [cancel](#)

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## delay *number*

**Description** The amount of time to delay the reboot  
During this period, the reboot can be cancelled.

**Context** [platform control slot](#) *string* [reboot](#) [delay](#) *number*

**Tree** [delay](#)

**Units** seconds

**Configurable** True

**Platforms** 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## force

**Description** Force a reboot of this component, overriding any synchronizations or other activities in progress  
This option can be dangerous, and may result in a module booting on an older image if used after an image change

**Context** [platform control slot](#) *string* [reboot](#) [force](#)

**Tree** [force](#)

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**message string**

<b>Description</b>	A user-defined message to broadcast to other users of the system
<b>Context</b>	<a href="#">platform control slot string reboot message string</a>
<b>Tree</b>	<a href="#">message</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**fabric slot number**

<b>Description</b>	Operational commands related to fabric modules
<b>Context</b>	<a href="#">platform fabric slot number</a>
<b>Tree</b>	<a href="#">fabric</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**slot number**

<b>Description</b>	Numeric identifier for the fabric module
<b>Context</b>	<a href="#">platform fabric slot number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**locator**

<b>Description</b>	Operational commands for the locator LED
<b>Context</b>	<a href="#">platform fabric slot number locator</a>
<b>Tree</b>	<a href="#">locator</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e



## disable

<b>Description</b>	Deactivates the locator LED for this component
<b>Context</b>	<a href="#">platform fabric slot number locator disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## enable

<b>Description</b>	Activate the locator LED for this component
<b>Context</b>	<a href="#">platform fabric slot number locator enable</a>
<b>Tree</b>	<a href="#">enable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## duration *number*

<b>Description</b>	Sets the duration to activate the locator LED, after which it will disable automatically
<b>Context</b>	<a href="#">platform fabric slot number locator enable duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Range</b>	10 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## reboot

<b>Description</b>	Trigger or a reboot of this component
<b>Context</b>	<a href="#">platform fabric slot number reboot</a>
<b>Tree</b>	<a href="#">reboot</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## cancel

<b>Description</b>	Cancels a pending reboot on this component
<b>Context</b>	<a href="#">platform fabric slot number reboot cancel</a>
<b>Tree</b>	<a href="#">cancel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## delay *number*

<b>Description</b>	The amount of time to delay the reboot During this period, the reboot can be cancelled.
<b>Context</b>	<a href="#">platform fabric slot number reboot delay number</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## message *string*

<b>Description</b>	A user-defined message to broadcast to other users of the system
<b>Context</b>	<a href="#">platform fabric slot number reboot message string</a>
<b>Tree</b>	<a href="#">message</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## fan-tray *id number*

<b>Description</b>	Operational commands related to fan modules
<b>Context</b>	<a href="#">platform fan-tray id number</a>
<b>Tree</b>	<a href="#">fan-tray</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**id number**

<b>Description</b>	Numeric identifier for the fan module
<b>Context</b>	<a href="#">platform fan-tray id number</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**locator**

<b>Description</b>	Operational commands for the locator LED
<b>Context</b>	<a href="#">platform fan-tray id number locator</a>
<b>Tree</b>	<a href="#">locator</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**disable**

<b>Description</b>	Deactivates the locator LED for this component
<b>Context</b>	<a href="#">platform fan-tray id number locator disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**enable**

<b>Description</b>	Activate the locator LED for this component
<b>Context</b>	<a href="#">platform fan-tray id number locator enable</a>
<b>Tree</b>	<a href="#">enable</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**duration number**

<b>Description</b>	Sets the duration to activate the locator LED, after which it will disable automatically
<b>Context</b>	<a href="#">platform fan-tray id number locator enable duration number</a>

<b>Tree</b>	<a href="#">duration</a>
<b>Range</b>	10 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **linecard** [slot number](#)

<b>Description</b>	Operational commands related to line cards
<b>Context</b>	<a href="#">platform linecard slot number</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **slot number**

<b>Description</b>	Numeric identifier for the line card
<b>Context</b>	<a href="#">platform linecard slot number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **locator**

<b>Description</b>	Operational commands for the locator LED
<b>Context</b>	<a href="#">platform linecard slot number locator</a>
<b>Tree</b>	<a href="#">locator</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

### **disable**

<b>Description</b>	Deactivates the locator LED for this component
<b>Context</b>	<a href="#">platform linecard slot number locator disable</a>
<b>Tree</b>	<a href="#">disable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## enable

<b>Description</b>	Activate the locator LED for this component
<b>Context</b>	<a href="#">platform linecard slot number locator enable</a>
<b>Tree</b>	<a href="#">enable</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## duration *number*

<b>Description</b>	Sets the duration to activate the locator LED, after which it will disable automatically
<b>Context</b>	<a href="#">platform linecard slot number locator enable duration number</a>
<b>Tree</b>	<a href="#">duration</a>
<b>Range</b>	10 to 3600
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## reboot

<b>Description</b>	Trigger or a reboot of this component
<b>Context</b>	<a href="#">platform linecard slot number reboot</a>
<b>Tree</b>	<a href="#">reboot</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## cancel

<b>Description</b>	Cancels a pending reboot on this component
<b>Context</b>	<a href="#">platform linecard slot number reboot cancel</a>
<b>Tree</b>	<a href="#">cancel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## **delay** *number*

<b>Description</b>	The amount of time to delay the reboot During this period, the reboot can be cancelled.
<b>Context</b>	<a href="#">platform linecard slot number reboot delay number</a>
<b>Tree</b>	<a href="#">delay</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## **message** *string*

<b>Description</b>	A user-defined message to broadcast to other users of the system
<b>Context</b>	<a href="#">platform linecard slot number reboot message string</a>
<b>Tree</b>	<a href="#">message</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## **redundancy**

<b>Description</b>	Top-level container for redundancy operational commands
<b>Context</b>	<a href="#">platform redundancy</a>
<b>Tree</b>	<a href="#">redundancy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## **switchover**

<b>Description</b>	Trigger a redundancy switchover to the other control module
<b>Context</b>	<a href="#">platform redundancy switchover</a>
<b>Tree</b>	<a href="#">switchover</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## synchronize

<b>Description</b>	Top-level container for manual synchronization activities
<b>Context</b>	<a href="#">platform redundancy synchronize</a>
<b>Tree</b>	<a href="#">synchronize</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## overlay

<b>Description</b>	Force a synchronization of the overlay filesystem between the active control module and the standby  This synchronizes all non-excluded directories in the overlay filesystem
<b>Context</b>	<a href="#">platform redundancy synchronize overlay</a>
<b>Tree</b>	<a href="#">overlay</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## system

<b>Description</b>	Force a synchronization of the system-required data between the active control module and the standby  This synchronizes images, configuration, checkpoints, and other system-required data
<b>Context</b>	<a href="#">platform redundancy synchronize system</a>
<b>Tree</b>	<a href="#">system</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

## show-fabric-bandwidth

<b>Description</b>	Show fabric bandwidth
<b>Context</b>	<a href="#">platform show-fabric-bandwidth</a>
<b>Tree</b>	<a href="#">show-fabric-bandwidth</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e

**trust**

<b>Description</b>	Operational commands related to Platform Trust
<b>Context</b>	<a href="#">platform trust</a>
<b>Tree</b>	<a href="#">trust</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**attestation**

<b>Description</b>	Tools commands input parameter for attestation to retrieve TCG BIOS Logs, IMA Logs
<b>Context</b>	<a href="#">platform trust attestation</a>
<b>Tree</b>	<a href="#">attestation</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**control [slot string](#)**

<b>Description</b>	Operational commands related to log retrieval for control modules
<b>Context</b>	<a href="#">platform trust attestation control slot string</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**slot [string](#)**

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">platform trust attestation control slot string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## log-retrieval

<b>Description</b>	Tools commands to retrieve BIOS and IMA Log
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval</a>
<b>Tree</b>	<a href="#">log-retrieval</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## bios

<b>Description</b>	TCG BIOS log retrieval commands
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios</a>
<b>Tree</b>	<a href="#">bios</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## display

<b>Description</b>	Enter the display context
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios display</a>
<b>Tree</b>	<a href="#">display</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## from *number*

<b>Description</b>	1-based log display starting index.
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios display from</a> <i>number</i>
<b>Tree</b>	<a href="#">from</a>
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pcr number**

<b>Description</b>	limit display to entries associated with a specific PCR. A value of -1 shows all PCRs
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios display pcr number</a>
<b>Tree</b>	<a href="#">pcr</a>
<b>Default</b>	-1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**to number**

<b>Description</b>	1-based log display terminal index. 0 indicates use maximum index in log.
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios display to number</a>
<b>Tree</b>	<a href="#">to</a>
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**summary**

<b>Description</b>	retrieve a summary of the log
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval bios summary</a>
<b>Tree</b>	<a href="#">summary</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ima**

<b>Description</b>	IMA log retrieval commands
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima</a>
<b>Tree</b>	<a href="#">ima</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## display

<b>Description</b>	Enter the display context
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima display</a>
<b>Tree</b>	<a href="#">display</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## from *number*

<b>Description</b>	1-based log display starting index.
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima display from</a> <i>number</i>
<b>Tree</b>	<a href="#">from</a>
<b>Default</b>	1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## pcr *number*

<b>Description</b>	limit display to entries associated with a specific PCR. A value of -1 shows all PCRs
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima display pcr</a> <i>number</i>
<b>Tree</b>	<a href="#">pcr</a>
<b>Default</b>	-1
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**to number**

<b>Description</b>	1-based log display terminal index. 0 indicates use maximum index in log.
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima display to number</a>
<b>Tree</b>	<a href="#">to</a>
<b>Default</b>	0
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**summary**

<b>Description</b>	retrieve a summary of the log
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">log-retrieval ima summary</a>
<b>Tree</b>	<a href="#">summary</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**pcr-quote**

<b>Description</b>	Tools commands input parameter to retrieve TPM PCR Quote This container includes every information element defined in the reference challenge-response interaction model for remote attestation. Corresponding values are based on TPM 2.0 structure definitions
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">pcr-quote</a>
<b>Tree</b>	<a href="#">pcr-quote</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**nonce *binary***

<b>Description</b>	A random number intended to guarantee freshness and for use as part of a replay-detection mechanism Note that a nonce sent into a TPM will typically be 160 or 256 binary digits long (20 or 32 bytes) If fewer binary digits are sent, this nonce object will be padded with leading zeros within Quotes
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returned from the TPM. Additionally if more bytes are sent, the nonce will be trimmed to the most significant binary digits

<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">pcr-quote nonce</a> <i>binary</i>
<b>Tree</b>	<a href="#">nonce</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pcr-selection** *string*

<b>Description</b>	A tpm2-tools compliant pcr selection string
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">pcr-quote</a> <a href="#">pcr-selection</a> <i>string</i>
<b>Tree</b>	<a href="#">pcr-selection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pcr-read**

<b>Description</b>	Tools commands input parameter to retrieve TPM PCR values Without pcr-selection, the command outputs all PCRs and their hash banks
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">pcr-read</a>
<b>Tree</b>	<a href="#">pcr-read</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **pcr-selection** *string*

<b>Description</b>	A tpm2-tools compliant pcr selection string
<b>Context</b>	<a href="#">platform trust attestation control slot</a> <i>string</i> <a href="#">pcr-read</a> <a href="#">pcr-selection</a> <i>string</i>
<b>Tree</b>	<a href="#">pcr-selection</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## disk-encryption

<b>Description</b>	Operational commands related to Disk Encryption
<b>Context</b>	<a href="#">platform trust disk-encryption</a>
<b>Tree</b>	<a href="#">disk-encryption</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

## control [slot string](#)

<b>Description</b>	Operational commands related to Disk Encryption for control modules
<b>Context</b>	<a href="#">platform trust disk-encryption control slot string</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

## slot [string](#)

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">platform trust disk-encryption control slot string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

## activate

<b>Description</b>	Activate Disk Encryption for a control module
<b>Context</b>	<a href="#">platform trust disk-encryption control slot string activate</a>
<b>Tree</b>	<a href="#">activate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e

## secure-boot

<b>Description</b>	Secure Boot operational commands
<b>Context</b>	<a href="#">platform trust secure-boot</a>
<b>Tree</b>	<a href="#">secure-boot</a>

<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### control *slot string*

<b>Description</b>	Operational commands related Secure Boot for control modules
<b>Context</b>	<a href="#">platform trust secure-boot control slot string</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### slot *string*

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">platform trust secure-boot control slot string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### activate

<b>Description</b>	Activate Secure Boot
<b>Context</b>	<a href="#">platform trust secure-boot control slot string activate</a>
<b>Tree</b>	<a href="#">activate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### confirmation-code *string*

<b>Description</b>	Indicates the secure-boot command confirmation-code
<b>Context</b>	<a href="#">platform trust secure-boot control slot string activate confirmation-code string</a>
<b>Tree</b>	<a href="#">confirmation-code</a>
<b>Configurable</b>	True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **serial-number** *string*

**Description** Indicates the serial-number of the control module

**Context** [platform trust secure-boot control slot](#) *string activate serial-number string*

**Tree** [serial-number](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **revoke**

**Description** Update UEFI Secure Boot forbidden database (dbx), Key Exchange Key (KEK), Platform Key (PK)

**Context** [platform trust secure-boot control slot](#) *string revoke*

**Tree** [revoke](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **confirmation-code** *string*

**Description** Indicates the secure-boot command confirmation-code

**Context** [platform trust secure-boot control slot](#) *string revoke confirmation-code string*

**Tree** [confirmation-code](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **serial-number** *string*

**Description** Indicates the serial-number of the control module

**Context** [platform trust secure-boot control slot](#) *string revoke serial-number string*

**Tree** [serial-number](#)

**Configurable** True



**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## update

**Description** Update UEFI Secure Boot authorized database (db), Key Exchange Key (KEK), Platform Key (PK)

**Context** [platform trust secure-boot control slot string update](#)

**Tree** [update](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## confirmation-code *string*

**Description** Indicates the secure-boot command confirmation-code

**Context** [platform trust secure-boot control slot string update confirmation-code string](#)

**Tree** [confirmation-code](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## serial-number *string*

**Description** Indicates the serial-number of the control module

**Context** [platform trust secure-boot control slot string update serial-number string](#)

**Tree** [serial-number](#)

**Configurable** True

**Platforms** 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 18 tools qos

```
qos
+ classifiers
+   multifield-classifier name string
+ interfaces
+   interface interface-id string
+   input
+     policer-policies
+       clear
+       policer policer-id number
+       clear
+     policer-templates
+       clear
+       policer index number
+       clear
+   output
+     queues
+       clear-statistics
+       queue queue-name string
+       queue-statistics
+         clear
+   pfc
+     clear-statistics
```

## 18.1 qos Descriptions

### qos

<b>Description</b>	Enter the qos context
<b>Context</b>	<a href="#">qos</a>
<b>Tree</b>	<a href="#">qos</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### classifiers

<b>Description</b>	Top level enclosing container for qos classifiers operational tools
<b>Context</b>	<a href="#">qos classifiers</a>
<b>Tree</b>	<a href="#">classifiers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### multifield-classifier *name string*

<b>Description</b>	List of multifield-classifier QoS policies
<b>Context</b>	<a href="#">qos classifiers multifield-classifier name string</a>
<b>Tree</b>	<a href="#">multifield-classifier</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### name *string*

<b>Description</b>	The name of multifield-classifier QoS policy
--------------------	--

<b>Context</b>	<a href="#">qos classifiers multifield-classifier name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interfaces

<b>Description</b>	Interfaces and subinterfaces with QoS configuration and state
<b>Context</b>	<a href="#">qos interfaces</a>
<b>Tree</b>	<a href="#">interfaces</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface [interface-id](#) *string*

<b>Description</b>	List of interfaces and subinterfaces referenced by QoS policies
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## interface-id *string*

<b>Description</b>	Identifier for the interface or subinterface
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**input**

<b>Description</b>	Enter the input context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a>
<b>Tree</b>	<a href="#">input</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-policies**

<b>Description</b>	Enter the policer-policies context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">policer-policies</a>
<b>Tree</b>	<a href="#">policer-policies</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">policer-policies</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer** [policer-id](#) *number*

<b>Description</b>	The list of policer instances belonging to the policer-policy definition
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input</a> <a href="#">policer-policies</a> <a href="#">policer</a> <a href="#">policer-id</a> <i>number</i>
<b>Tree</b>	<a href="#">policer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-id** *number*

<b>Description</b>	Enter the policer-id context
--------------------	------------------------------

<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">policer policer-id</a> <i>number</i>
<b>Range</b>	0 to 31
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-policies</a> <a href="#">policer policer-id</a> <i>number</i> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer-templates**

<b>Description</b>	Enter the policer-templates context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates</a>
<b>Tree</b>	<a href="#">policer-templates</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

**policer** [index](#) *number*

<b>Description</b>	The list of policer instances belonging to the template definition
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> input <a href="#">policer-templates</a> <a href="#">policer index</a> <i>number</i>
<b>Tree</b>	<a href="#">policer</a>

<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **index number**

<b>Description</b>	The policer index
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-templates policer index number</a>
<b>Range</b>	1 to 32
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">input policer-templates policer index number clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

### **output**

<b>Description</b>	Enter the output context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output</a>
<b>Tree</b>	<a href="#">output</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **queues**

<b>Description</b>	Enter the queues context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues</a>
<b>Tree</b>	<a href="#">queues</a>

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear-statistics

<b>Description</b>	Enter the clear-statistics context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues clear-statistics</a>
<b>Tree</b>	<a href="#">clear-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue [queue-name](#) *string*

<b>Description</b>	Enter the queue list instance
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>string</i>
<b>Tree</b>	<a href="#">queue</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## queue-name *string*

<b>Description</b>	The queue name
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>string</i>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## queue-statistics

<b>Description</b>	Enter the queue-statistics context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>string</i> <a href="#">queue-statistics</a>
<b>Tree</b>	<a href="#">queue-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">output queues queue queue-name</a> <i>string</i> <a href="#">queue-statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## pfc

<b>Description</b>	Clearing PFC statistics on per interface basis
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc</a>
<b>Tree</b>	<a href="#">pfc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## clear-statistics

<b>Description</b>	Enter the clear-statistics context
<b>Context</b>	<a href="#">qos interfaces interface interface-id</a> <i>string</i> <a href="#">pfc clear-statistics</a>
<b>Tree</b>	<a href="#">clear-statistics</a>

---

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H4, 7250 IXR-10e, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

# 19 tools system

```

system
+ aaa
  + authentication
  + force-all-user-password-change
  + session id number
    + disconnect
  + user username string
    + force-password-change
    + unlock
  + authorization
  + authz-policy
    + clear
    + probe
      + rpc string
      + user string
    + remove
    + rotate
      + created-on number
      + policy string
      + version string
+ app-management
  + application name string
  + kill
  + quit
  + reload
  + restart
    + cold
    + warm
  + start
  + statistics
  + clear
  + stop
+ boot
  + golden-image
  + clear
  + image string
+ cgroup
+ configuration
  + candidate name string
  + clear
  + checkpoint id (number | checkpoint-name)
  + clear
  + load
  + revert
  + confirmed-accept
  + persist-id string
  + confirmed-reject
  + persist-id string
  + generate-checkpoint
  + comment string
  + name string
  + pathz-policy
  + clear
  + remove
  + rescue-clear
  + rescue-save

```

```

+ save
+ session id number
+ clear
+ upgrade
+ checkpoint id (number | checkpoint-name)
+ file string
+ rescue
+ startup
+ validation-check keyword
+ dhcp-relay
+ update-dns-entries
+ dhcp-server
+ network-instance name string
+ dhcpv4
+ statistics
+ clear
+ dhcpv6
+ statistics
+ clear
+ event-handler
+ instance name string
+ reload
+ statistics
+ clear
+ grpc-server name string
+ client id number
+ disconnect
+ gnoi
+ healthz
+ chassis
+ clear
+ clear
+ control
+ clear
+ slot string
+ fabric
+ clear
+ slot number
+ fan-tray
+ clear
+ id number
+ linecard
+ clear
+ slot number
+ power-supply
+ clear
+ id number
+ transceiver
+ clear
+ interface string
+ statistics
+ clear
+ l2cp-transparency
+ dot1x
+ clear
+ efm-oam
+ clear
+ elmi
+ clear
+ esmc
+ clear
+ l2cp-total-statistics
+ clear
+ lacp

```

```

+ clear
+ lldp
+ clear
+ ptp
+ clear
+ xstp
+ clear
+ lldp
+ interface name string
+ statistics
+ clear
+ statistics
+ clear
+ mirroring
+ mirroring-instance name string
+ mirror-destination
+ statistics
+ clear
+ netconf-server name string
+ session session-id number
+ clear
+ statistics
+ clear
+ statistics
+ clear
+ packet-trace-base64
+ interface string
+ packet binary
+ sync
+ ptp
+ instance instance-index number
+ clear-statistics
+ default-ds
+ statistics
+ clear
+ time-recovery-engine
+ statistics
+ clear
+ inactive-peers
+ clear
+ port-ds-configured-peer port-index number
+ statistics
+ clear
+ port-ds-discovered-peer port-index number
+ statistics
+ clear
+ port-ds-interface port-index number
+ statistics
+ clear
+ tls
+ generate-csr
+ common-name string
+ country string
+ domain-names string
+ email string
+ ip-addresses (ipv4-address | ipv6-address)
+ key-size number
+ key-type keyword
+ locality string
+ organization string
+ organization-unit string
+ spiffe-id string
+ state string
+ type keyword

```

```
+ generate-self-signed
+ common-name string
+ country string
+ domain-names string
+ duration number
+ email string
+ ip-addresses (ipv4-address | ipv6-address)
+ key-size number
+ key-type keyword
+ locality string
+ organization string
+ organization-unit string
+ spiffe-id string
+ state string
+ type keyword
+ server-profile name string
+ certz
+   + remove
+   + rotate
+     + certificate string
+     + created-on number
+     + crl string
+     + key string
+     + trust-anchor string
+     + version string
```

## 19.1 system Descriptions

### system

<b>Description</b>	Enclosing container for system management.
<b>Context</b>	<a href="#">system</a>
<b>Tree</b>	<a href="#">system</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### aaa

<b>Description</b>	Top-level container for operational commands related to AAA
<b>Context</b>	<a href="#">system aaa</a>
<b>Tree</b>	<a href="#">aaa</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### authentication

<b>Description</b>	Operational commands related to authentication
<b>Context</b>	<a href="#">system aaa authentication</a>
<b>Tree</b>	<a href="#">authentication</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### force-all-user-password-change

<b>Description</b>	Set change-on-first-login to true for all users This command will only take effect if the feature change-on-first-login is currently set to true.
<b>Context</b>	<a href="#">system aaa authentication force-all-user-password-change</a>
<b>Tree</b>	<a href="#">force-all-user-password-change</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**session id** *number*

<b>Description</b>	List of active sessions in the system
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**id** *number*

<b>Description</b>	System generated session ID
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**disconnect**

<b>Description</b>	Disconnect the cli session, requesting the cli to terminate
<b>Context</b>	<a href="#">system aaa authentication session id</a> <i>number</i> <a href="#">disconnect</a>
<b>Tree</b>	<a href="#">disconnect</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**user** [username](#) *string*

<b>Description</b>	List of local users including admin and linuxadmin
<b>Context</b>	<a href="#">system aaa authentication user</a> <a href="#">username</a> <i>string</i>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**username** *string*

<b>Description</b>	Enter the username context
<b>Context</b>	<a href="#">system aaa authentication user</a> <a href="#">username</a> <i>string</i>
<b>Configurable</b>	True



**Platforms** Supported on all platforms

## force-password-change

**Description** Set change-on-first-login to true for this user  
This command will only take effect if the feature change-on-first-login is currently set to true.

**Context** [system aaa authentication user username string force-password-change](#)

**Tree** [force-password-change](#)

**Configurable** True

**Platforms** Supported on all platforms

## unlock

**Description** Unlock the user, This will change its lockout state into false

**Context** [system aaa authentication user username string unlock](#)

**Tree** [unlock](#)

**Configurable** True

**Platforms** Supported on all platforms

## authorization

**Description** Operational commands relating to authorization

**Context** [system aaa authorization](#)

**Tree** [authorization](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## authz-policy

**Description** Top-level container for operational commands relating to Authz gRPC policies

**Context** [system aaa authorization authz-policy](#)

**Tree** [authz-policy](#)

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear Authz authorization policy counters
<b>Context</b>	<a href="#">system aaa authorization authz-policy clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## probe

<b>Description</b>	Perform a test against the current policy Both a user and rpc must be provided.
<b>Context</b>	<a href="#">system aaa authorization authz-policy probe</a>
<b>Tree</b>	<a href="#">probe</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rpc string

<b>Description</b>	The RPC to test access to as the provided user This follows the gNSI gRPC path format, in that it is /<pkg>.<service>/<rpc>, for example /gnmi.gNMI/Get.
<b>Context</b>	<a href="#">system aaa authorization authz-policy probe rpc string</a>
<b>Tree</b>	<a href="#">rpc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,

7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **user string**

<b>Description</b>	The user to test the current policy with This can be either a SPIFFE URI or username.
<b>Context</b>	<a href="#">system aaa authorization authz-policy probe user string</a>
<b>Tree</b>	<a href="#">user</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **remove**

<b>Description</b>	Remove Authz authorization policy from the system Since there is only a single system-wide gRPC authorization policy, it will revert its contents to the factory default authorization policy which authorizes any gRPC calls for every user.
<b>Context</b>	<a href="#">system aaa authorization authz-policy remove</a>
<b>Tree</b>	<a href="#">remove</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## **rotate**

<b>Description</b>	Perform a rotation of the Authz gRPC policy
<b>Context</b>	<a href="#">system aaa authorization authz-policy rotate</a>
<b>Tree</b>	<a href="#">rotate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**created-on** *number*

<b>Description</b>	Sets the created on value for the new policy  Value is the number of seconds since the epoch. For reference the current time from the epoch in most Linux distributions can be retrieved via 'date +%s'. You can also select a specific date via 'date -d "2023-03-31" +%s'.  If no value is provided the systems current date and time is used.
<b>Context</b>	<a href="#">system aaa authorization authz-policy rotate created-on</a> <i>number</i>
<b>Tree</b>	<a href="#">created-on</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**policy** *string*

<b>Description</b>	Contains the gRPC authorization policy as a JSON-formatted string  For example: { "name": "Default policy", "allow_rules": [ { "name": "admin-access", "source": { "principals": [ "admin" ] }, "request": { "paths": [ "/" ] } } ] }
<b>Context</b>	<a href="#">system aaa authorization authz-policy rotate policy</a> <i>string</i>
<b>Tree</b>	<a href="#">policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**version** *string*

<b>Description</b>	A version string to store with the policy  No constraints are applied other than the value must be a string.  If no value is provided no default is used.
<b>Context</b>	<a href="#">system aaa authorization authz-policy rotate version</a> <i>string</i>
<b>Tree</b>	<a href="#">version</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## app-management

**Description** Operational commands related to app-management  
**Context** [system app-management](#)  
**Tree** [app-management](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## application *name string*

**Description** List of all applications managed by the application manager  
**Context** [system app-management application name string](#)  
**Tree** [application](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## name *string*

**Description** Unique name of this application instance  
**Context** [system app-management application name string](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## kill

**Description** Terminate the application instance ungracefully  
**Context** [system app-management application name string kill](#)  
**Tree** [kill](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## quit

<b>Description</b>	Terminate the application instance, requesting it to core dump
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">quit</a>
<b>Tree</b>	<a href="#">quit</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## reload

<b>Description</b>	Reload the configuration of the application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">reload</a>
<b>Tree</b>	<a href="#">reload</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## restart

<b>Description</b>	<p>Restart the application instance</p> <p>The best restart that is supported by the application is used if neither 'warm' or 'cold' is specified. If 'warm' restart is supported that will be used, or 'cold' if 'warm' is unavailable.</p> <p>A 'warm' restart will result in the application leaving its state in IDB during the restart, and recovering it post restart. This restart type results in less disruption to surrounding applications that would depend on the restarting applications state.</p> <p>A 'cold' restart will result in a normal stop/start of the application, including the purging of its state in IDB.</p>
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">restart</a>
<b>Tree</b>	<a href="#">restart</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## cold

<b>Description</b>	Perform a cold restart of the application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">restart</a> <a href="#">cold</a>

---

<b>Tree</b>	<a href="#">cold</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## warm

<b>Description</b>	Perform a warm restart of the application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">restart</a> <a href="#">warm</a>
<b>Tree</b>	<a href="#">warm</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## start

<b>Description</b>	Start the application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">start</a>
<b>Tree</b>	<a href="#">start</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Top-level grouping of operational commands related to application statistics
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Clear statistics for this application instance
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**stop**

<b>Description</b>	Terminate the application instance gracefully
<b>Context</b>	<a href="#">system app-management application name</a> <i>string</i> <a href="#">stop</a>
<b>Tree</b>	<a href="#">stop</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**boot**

<b>Description</b>	Top-level container for operational commands related to booting the system
<b>Context</b>	<a href="#">system boot</a>
<b>Tree</b>	<a href="#">boot</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**golden-image**

<b>Description</b>	Container for operational commands related to golden image
<b>Context</b>	<a href="#">system boot golden-image</a>
<b>Tree</b>	<a href="#">golden-image</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Unset the golden-image
<b>Context</b>	<a href="#">system boot golden-image clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



**image string**

<b>Description</b>	Sets the golden image the system uses  This command selects an image to act as a golden-image to which the system reverts when a factory reset operation is requested.
<b>Context</b>	<a href="#">system boot golden-image image string</a>
<b>Tree</b>	<a href="#">image</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**cgroup**

<b>Description</b>	Top-level container for query commands related to cgroup in the system
<b>Context</b>	<a href="#">system cgroup</a>
<b>Tree</b>	<a href="#">cgroup</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**configuration**

<b>Description</b>	Top-level container for operational commands related to the system configuration
<b>Context</b>	<a href="#">system configuration</a>
<b>Tree</b>	<a href="#">configuration</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**candidate name string**

<b>Description</b>	List of configuration candidates currently active
<b>Context</b>	<a href="#">system configuration candidate name string</a>
<b>Tree</b>	<a href="#">candidate</a>
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **name** *string*

**Description** The name of the candidate

**Context** [system configuration candidate name](#) *string*

**String Length** 1 to 255

**Configurable** True

**Platforms** Supported on all platforms

### **clear**

**Description** Clear the candidate from the system, discarding any changes  
This results in any users currently in the candidate being dropped back to running mode.

**Context** [system configuration candidate name](#) *string clear*

**Tree** [clear](#)

**Configurable** True

**Platforms** Supported on all platforms

### **checkpoint id** (*number | checkpoint-name*)

**Description** List of current checkpoints present in the system

**Context** [system configuration checkpoint id](#) (*number | checkpoint-name*)

**Tree** [checkpoint](#)

**Configurable** True

**Platforms** Supported on all platforms

### **id** (*number | checkpoint-name*)

**Description** System generated ID, or operator defined name for the checkpoint

**Context** [system configuration checkpoint id](#) (*number | checkpoint-name*)

**Configurable** True

**Platforms** Supported on all platforms

## clear

<b>Description</b>	Clear the checkpoint from the system
<b>Context</b>	<a href="#">system configuration checkpoint id (number   checkpoint-name) clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## load

<b>Description</b>	Load candidate from saved checkpoint configuration
<b>Context</b>	<a href="#">system configuration checkpoint id (number   checkpoint-name) load</a>
<b>Tree</b>	<a href="#">load</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## revert

<b>Description</b>	Revert running system configuration to the saved checkpoint configuration This functions as a load and commit action.
<b>Context</b>	<a href="#">system configuration checkpoint id (number   checkpoint-name) revert</a>
<b>Tree</b>	<a href="#">revert</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## confirmed-accept

<b>Description</b>	Accepts an in progress commit and stops the confirmation timer
<b>Context</b>	<a href="#">system configuration confirmed-accept</a>
<b>Tree</b>	<a href="#">confirmed-accept</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## persist-id *string*

<b>Description</b>	Specifies the persist-id to which the commit confirmed accept applies
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<b>Context</b>	<a href="#">system configuration confirmed-accept persist-id</a> <i>string</i>
<b>Tree</b>	<a href="#">persist-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### confirmed-reject

<b>Description</b>	Rejects an in progress commit and stops the confirmation timer
<b>Context</b>	<a href="#">system configuration confirmed-reject</a>
<b>Tree</b>	<a href="#">confirmed-reject</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### persist-id *string*

<b>Description</b>	Specifies the persist-id to which the commit confirmed reject applies
<b>Context</b>	<a href="#">system configuration confirmed-reject persist-id</a> <i>string</i>
<b>Tree</b>	<a href="#">persist-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### generate-checkpoint

<b>Description</b>	Generate a checkpoint point based on the current running configuration
<b>Context</b>	<a href="#">system configuration generate-checkpoint</a>
<b>Tree</b>	<a href="#">generate-checkpoint</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### comment *string*

<b>Description</b>	User provided comment to associate with the checkpoint
<b>Context</b>	<a href="#">system configuration generate-checkpoint comment</a> <i>string</i>
<b>Tree</b>	<a href="#">comment</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	User provided name of the checkpoint
<b>Context</b>	<a href="#">system configuration generate-checkpoint name string</a>
<b>Tree</b>	<a href="#">name</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**pathz-policy**

<b>Description</b>	Top-level container for operational commands relating to Pathz gRPC policies
<b>Context</b>	<a href="#">system configuration pathz-policy</a>
<b>Tree</b>	<a href="#">pathz-policy</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear Pathz authorization policy counters
<b>Context</b>	<a href="#">system configuration pathz-policy clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remove**

<b>Description</b>	Remove Pathz authorization policy from the system
<b>Context</b>	<a href="#">system configuration pathz-policy remove</a>
<b>Tree</b>	<a href="#">remove</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rescue-clear

**Description** Remove rescue configuration  
**Context** [system configuration rescue-clear](#)  
**Tree** [rescue-clear](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## rescue-save

**Description** Save current running configuration as rescue configuration - rescue-config.json  
**Context** [system configuration rescue-save](#)  
**Tree** [rescue-save](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## save

**Description** Save current running configuration as initial (startup) configuration - config.json  
**Context** [system configuration save](#)  
**Tree** [save](#)  
**Configurable** True  
**Platforms** Supported on all platforms

## session id *number*

**Description** List of configuration sessions currently active  
**Context** [system configuration session id \*number\*](#)  
**Tree** [session](#)  
**Configurable** True

**Platforms** Supported on all platforms

### **id** *number*

**Description** System generated ID for the configuration session  
**Context** [system configuration session id](#) *number*  
**Configurable** True  
**Platforms** Supported on all platforms

### **clear**

**Description** Clear the session from the system, discarding any changes  
**Context** [system configuration session id](#) *number clear*  
**Tree** [clear](#)  
**Configurable** True  
**Platforms** Supported on all platforms

### **upgrade**

**Description** Operational commands related to configuration upgrade  
**Context** [system configuration upgrade](#)  
**Tree** [upgrade](#)  
**Configurable** True  
**Platforms** Supported on all platforms

### **checkpoint id** (*number* | *checkpoint-name*)

**Description** List of configuration checkpoints  
**Context** [system configuration upgrade checkpoint id](#) (*number* | *checkpoint-name*)  
**Tree** [checkpoint](#)  
**Configurable** True  
**Platforms** Supported on all platforms

### **id** (*number* | *checkpoint-name*)

**Description** System generated ID, or operator defined name for the checkpoint

<b>Context</b>	<a href="#">system configuration upgrade checkpoint id</a> ( <i>number   checkpoint-name</i> )
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**file string**

<b>Description</b>	System file path to a json configuration file
<b>Context</b>	<a href="#">system configuration upgrade file string</a>
<b>Tree</b>	<a href="#">file</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**rescue**

<b>Description</b>	Rescue configuration
<b>Context</b>	<a href="#">system configuration upgrade rescue</a>
<b>Tree</b>	<a href="#">rescue</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**startup**

<b>Description</b>	Startup (initial) configuration
<b>Context</b>	<a href="#">system configuration upgrade startup</a>
<b>Tree</b>	<a href="#">startup</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**validation-check keyword**

<b>Description</b>	Specifies the kind of validation that will be executed after the content is upgraded If the validation fails the upgraded content will not be persisted.
<b>Context</b>	<a href="#">system configuration upgrade validation-check keyword</a>
<b>Tree</b>	<a href="#">validation-check</a>
<b>Default</b>	replace



<b>Options</b>	<ul style="list-style-type: none"> <li>• skip Skip validation of the upgraded content</li> <li>• merge Validation is done as if the content was used in a load merge operation</li> <li>• replace Validation is done as if the content was used in a full config replace operation</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcp-relay

<b>Description</b>	Enable the dhcp-relay context
<b>Context</b>	<a href="#">system dhcp-relay</a>
<b>Tree</b>	<a href="#">dhcp-relay</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## update-dns-entries

<b>Description</b>	Update all dhcp-relay server domain name resolutions A server host entry that cannot be resolved will be unavailable until it can be successfully resolved.
<b>Context</b>	<a href="#">system dhcp-relay update-dns-entries</a>
<b>Tree</b>	<a href="#">update-dns-entries</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcp-server

<b>Description</b>	Enable the dhcp-server context
<b>Context</b>	<a href="#">system dhcp-server</a>
<b>Tree</b>	<a href="#">dhcp-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**network-instance** *name string*

<b>Description</b>	List of network instances to run a dhcp server in
<b>Context</b>	<a href="#">system dhcp-server network-instance name string</a>
<b>Tree</b>	<a href="#">network-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Network Instance
<b>Context</b>	<a href="#">system dhcp-server network-instance name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**dhcpv4**

<b>Description</b>	Enter the dhcpv4 context
<b>Context</b>	<a href="#">system dhcp-server network-instance name string dhcpv4</a>
<b>Tree</b>	<a href="#">dhcpv4</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system dhcp-server network-instance name string dhcpv4 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">system dhcp-server network-instance name string dhcpv4 statistics clear</a>

<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## dhcpv6

<b>Description</b>	Enter the dhcpv6 context
<b>Context</b>	<a href="#">system dhcp-server network-instance name <i>string</i> dhcpv6</a>
<b>Tree</b>	<a href="#">dhcpv6</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system dhcp-server network-instance name <i>string</i> dhcpv6 statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">system dhcp-server network-instance name <i>string</i> dhcpv6 statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## event-handler

<b>Description</b>	Top-level container for operational commands on event handler and event handling instances
<b>Context</b>	<a href="#">system event-handler</a>
<b>Tree</b>	<a href="#">event-handler</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**instance** *name string*

<b>Description</b>	List of all event handler instances
<b>Context</b>	<a href="#">system event-handler instance name string</a>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	20

**name** *string*

<b>Description</b>	A user-defined name for this event handler instance
<b>Context</b>	<a href="#">system event-handler instance name string</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**reload**

<b>Description</b>	Reload the Python script for this event handler instance
<b>Context</b>	<a href="#">system event-handler instance name string reload</a>
<b>Tree</b>	<a href="#">reload</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**statistics**

<b>Description</b>	Top-level container for operational commands on event handler statistics
<b>Context</b>	<a href="#">system event-handler instance name string statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**clear**

<b>Description</b>	Clear statistics for this event handler instance
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<b>Context</b>	<a href="#">system event-handler instance name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **grpc-server** *name string*

<b>Description</b>	List of configured gRPC server instances
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i>
<b>Tree</b>	<a href="#">grpc-server</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **name** *string*

<b>Description</b>	User-provided name of this server instance
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **client id** *number*

<b>Description</b>	List of active gRIBI client sessions
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id</a> <i>number</i>
<b>Tree</b>	<a href="#">client</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	System generated ID for for the client
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id number</a>
<b>Range</b>	0 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**disconnect**

<b>Description</b>	Disconnect this client from the server
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">client id number</a> <a href="#">disconnect</a>
<b>Tree</b>	<a href="#">disconnect</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**gnoi**

<b>Description</b>	Top-level container for operational commands related to gNOI
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi</a>
<b>Tree</b>	<a href="#">gnoi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**healthz**

<b>Description</b>	gNOI Healthz tools commands
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz</a>
<b>Tree</b>	<a href="#">healthz</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## chassis

<b>Description</b>	Chassis component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz chassis</a>
<b>Tree</b>	<a href="#">chassis</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz chassis clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear all healthz events
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## control

<b>Description</b>	Control module component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz control</a>
<b>Tree</b>	<a href="#">control</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz control clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## slot *string*

<b>Description</b>	Slot identifier for the control module
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz control slot</a> <i>string</i>
<b>Tree</b>	<a href="#">slot</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fabric

<b>Description</b>	Fabric module component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fabric</a>
<b>Tree</b>	<a href="#">fabric</a>



<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fabric clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## slot number

<b>Description</b>	Numeric identifier for the fabric module
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fabric slot number</a>
<b>Tree</b>	<a href="#">slot</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## fan-tray

<b>Description</b>	Fan component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fan-tray</a>
<b>Tree</b>	<a href="#">fan-tray</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fan-tray clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## id number

<b>Description</b>	Numeric identifier for the fan module
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz fan-tray id number</a>
<b>Tree</b>	<a href="#">id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## linecard

<b>Description</b>	Line card component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz linecard</a>
<b>Tree</b>	<a href="#">linecard</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz linecard clear</a>
<b>Tree</b>	<a href="#">clear</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**slot number**

<b>Description</b>	Numeric identifier for the line card
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz linecard slot number</a>
<b>Tree</b>	<a href="#">slot</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**power-supply**

<b>Description</b>	Power supply component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz power-supply</a>
<b>Tree</b>	<a href="#">power-supply</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz power-supply clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**id number**

<b>Description</b>	Numeric identifier for the power supply module
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz power-supply id number</a>
<b>Tree</b>	<a href="#">id</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**transceiver**

<b>Description</b>	Transceiver component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz transceiver</a>
<b>Tree</b>	<a href="#">transceiver</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear healthz events for this component
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz transceiver clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**interface string**

<b>Description</b>	Interface name for the transceiver module
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">gnoi healthz transceiver interface string</a>
<b>Tree</b>	<a href="#">interface</a>

<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	A collection of counters that were collected by the gRPC during the authentication process.
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clear gNMI network instance authentication counters
<b>Context</b>	<a href="#">system grpc-server name</a> <i>string</i> <a href="#">statistics</a> <a href="#">clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## l2cp-transparency

<b>Description</b>	Enable the l2cp-transparency context
<b>Context</b>	<a href="#">system l2cp-transparency</a>
<b>Tree</b>	<a href="#">l2cp-transparency</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## dot1x

<b>Description</b>	Enter the dot1x context
<b>Context</b>	<a href="#">system l2cp-transparency dot1x</a>
<b>Tree</b>	<a href="#">dot1x</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the 802.1x Port based Network Access Control protocol
<b>Context</b>	<a href="#">system l2cp-transparency dot1x clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## efm-oam

<b>Description</b>	Enter the efm-oam context
<b>Context</b>	<a href="#">system l2cp-transparency efm-oam</a>
<b>Tree</b>	<a href="#">efm-oam</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the Ethernet in the First Mile OAM protocol
<b>Context</b>	<a href="#">system l2cp-transparency efm-oam clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## elmi

<b>Description</b>	Enter the elmi context
<b>Context</b>	<a href="#">system l2cp-transparency elmi</a>
<b>Tree</b>	<a href="#">elmi</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the Ethernet Local Management Interface protocol
<b>Context</b>	<a href="#">system l2cp-transparency elmi clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## esmc

<b>Description</b>	Enter the esmc context
<b>Context</b>	<a href="#">system l2cp-transparency esmc</a>
<b>Tree</b>	<a href="#">esmc</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the Ethernet Synchronization Messaging Channel protocol
<b>Context</b>	<a href="#">system l2cp-transparency esmc clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7730 SXR-1d-32D, 7730 SXR-1x-44S

## l2cp-total-statistics

<b>Description</b>	Enter the l2cp-total-statistics context
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<b>Context</b>	<a href="#">system l2cp-transparency l2cp-total-statistics</a>
<b>Tree</b>	<a href="#">l2cp-total-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the global statistics for the L2CP protocols
<b>Context</b>	<a href="#">system l2cp-transparency l2cp-total-statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## lACP

<b>Description</b>	Enter the lACP context
<b>Context</b>	<a href="#">system l2cp-transparency lACP</a>
<b>Tree</b>	<a href="#">lACP</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for Link Aggregation Control Protocol
<b>Context</b>	<a href="#">system l2cp-transparency lACP clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S



## lldp

<b>Description</b>	Enter the lldp context
<b>Context</b>	<a href="#">system l2cp-transparency lldp</a>
<b>Tree</b>	<a href="#">lldp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for Link Layer Discovery Protocol
<b>Context</b>	<a href="#">system l2cp-transparency lldp clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## ptp

<b>Description</b>	Enter the ptp context
<b>Context</b>	<a href="#">system l2cp-transparency ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears the statistics for the Precision Time Protocol
<b>Context</b>	<a href="#">system l2cp-transparency ptp clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## xstp

**Description** Enter the xstp context

**Context** [system l2cp-transparency xstp](#)

**Tree** [xstp](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

**Description** Clears the statistics for all the Spanning Tree Protocols

**Context** [system l2cp-transparency xstp clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## lldp

**Description** Top-level container for LLDP tools

**Context** [system lldp](#)

**Tree** [lldp](#)

**Configurable** True

**Platforms** Supported on all platforms

## interface [name string](#)

**Description** List of interfaces on which LLDP is enabled

**Context** [system lldp interface name string](#)

**Tree** [interface](#)

**Configurable** True

**Platforms** Supported on all platforms

### **name** *string*

**Description** Reference to a LLDP Ethernet interface

**Context** [system lldp interface name](#) *string*

**Configurable** True

**Platforms** Supported on all platforms

### **statistics**

**Description** LLDP interface statistics tools commands

**Context** [system lldp interface name](#) *string* [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** Supported on all platforms

### **clear**

**Description** Clear interface LLDP statistics

**Context** [system lldp interface name](#) *string* [statistics](#) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** Supported on all platforms

### **statistics**

**Description** LLDP global statistics tools commands

**Context** [system lldp](#) [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** Supported on all platforms

### **clear**

**Description** Clear global LLDP statistics

<b>Context</b>	<a href="#">system lldp statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## mirroring

<b>Description</b>	Enable the mirroring context
<b>Context</b>	<a href="#">system mirroring</a>
<b>Tree</b>	<a href="#">mirroring</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## mirroring-instance *name string*

<b>Description</b>	Enter the mirroring-instance list instance
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string</a>
<b>Tree</b>	<a href="#">mirroring-instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## *name string*

<b>Description</b>	A unique name identifying the mirroring instance
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## mirror-destination

<b>Description</b>	tools mirror destination
<b>Context</b>	<a href="#">system mirroring mirroring-instance name string mirror-destination</a>
<b>Tree</b>	<a href="#">mirror-destination</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## statistics

**Description** Enter the statistics context

**Context** [system mirroring mirroring-instance name](#) *string* [mirror-destination statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## clear

**Description** Enter the clear context

**Context** [system mirroring mirroring-instance name](#) *string* [mirror-destination statistics](#) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms** 7220 IXR-D4, 7220 IXR-D5, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## netconf-server [name](#) *string*

**Description** Enter the netconf-server list instance

**Context** [system netconf-server name](#) *string*

**Tree** [netconf-server](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## name *string*

**Description** NETCONF server instance name

**Context** [system netconf-server name](#) *string*

**String Length** 1 to 247

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session *session-id number*

<b>Description</b>	Enter the session list instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string session session-id number</i>
<b>Tree</b>	<a href="#">session</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### session-id *number*

<b>Description</b>	Enter the session-id context
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string session session-id number</i>
<b>Range</b>	1 to 4294967295
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### clear

<b>Description</b>	Clear the NETCONF server instance session
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string session session-id number clear</i>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">session session-id</a> <i>number</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear statistics information for the NETCONF session
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">session session-id</a> <i>number</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clear statistics information for the NETCONF server instance
<b>Context</b>	<a href="#">system netconf-server name</a> <i>string</i> <a href="#">statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>

<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## packet-trace-base64

<b>Description</b>	Tools command to report the forwarding behavior for a specified test packet (packet specified in base64 format)
<b>Context</b>	<a href="#">system packet-trace-base64</a>
<b>Tree</b>	<a href="#">packet-trace-base64</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## interface *string*

<b>Description</b>	References the configured name of the interface in which to inject the probe packet
<b>Context</b>	<a href="#">system packet-trace-base64 interface <i>string</i></a>
<b>Tree</b>	<a href="#">interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b

## packet *binary*

<b>Description</b>	Packet content encoded in base64 string format
<b>Context</b>	<a href="#">system packet-trace-base64 packet <i>binary</i></a>
<b>Tree</b>	<a href="#">packet</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b



**sync**

<b>Description</b>	Top-level grouping for sync operational commands
<b>Context</b>	<a href="#">system sync</a>
<b>Tree</b>	<a href="#">sync</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**ptp**

<b>Description</b>	Grouping for ptp operational commands
<b>Context</b>	<a href="#">system sync ptp</a>
<b>Tree</b>	<a href="#">ptp</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance [instance-index](#) *number***

<b>Description</b>	Grouping for PTP instance operational commands
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i>
<b>Tree</b>	<a href="#">instance</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**instance-index *number***

<b>Description</b>	Enter the instance-index context
<b>Context</b>	<a href="#">system sync ptp instance instance-index</a> <i>number</i>
<b>Range</b>	1 to 10
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear-statistics

<b>Description</b>	Clears all PTP statistics for PTP
<b>Context</b>	<a href="#">system sync ptp instance instance-index number clear-statistics</a>
<b>Tree</b>	<a href="#">clear-statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## default-ds

<b>Description</b>	The default data set of the PTP Instance In the context of the protocol, this data set is required for an Ordinary Clock or Boundary Clock
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds</a>
<b>Tree</b>	<a href="#">default-ds</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears PTP statistics and event counters in the default-ds
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## time-recovery-engine

<b>Description</b>	Enter the time-recovery-engine context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine</a>
<b>Tree</b>	<a href="#">time-recovery-engine</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## clear

<b>Description</b>	Clears all PTP statistics for PTP time recovery engine
<b>Context</b>	<a href="#">system sync ptp instance instance-index number default-ds time-recovery-engine statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## inactive-peers

<b>Description</b>	Enter the inactive-peers context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number inactive-peers</a>
<b>Tree</b>	<a href="#">inactive-peers</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clears information related to inactive PTP peers
<b>Context</b>	<a href="#">system sync ptp instance instance-index number inactive-peers clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-ds-configured-peer [port-index number](#)**

<b>Description</b>	Grouping for PTP Port DS for configured IP peers operational commands
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-configured-peer port-index number</a>
<b>Tree</b>	<a href="#">port-ds-configured-peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-index *number***

<b>Description</b>	Enter the port-index context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-configured-peer port-index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-configured-peer port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clears all PTP statistics for this PTP Port DS
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-configured-peer port-index number statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-ds-discovered-peer [port-index number](#)**

<b>Description</b>	Grouping for PTP Port DS for discovered IP peers operational commands
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-discovered-peer port-index number</a>
<b>Tree</b>	<a href="#">port-ds-discovered-peer</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-index *number***

<b>Description</b>	Enter the port-index context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-discovered-peer port-index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-discovered-peer port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clears all PTP statistics for this PTP Port DS
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-discovered-peer port-index number statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-ds-interface [port-index number](#)**

<b>Description</b>	Grouping for PTP Port DS for interfaces operational commands
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface port-index number</a>
<b>Tree</b>	<a href="#">port-ds-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**port-index [number](#)**

<b>Description</b>	Enter the port-index context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface port-index number</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface port-index number statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**clear**

<b>Description</b>	Clears all PTP statistics for this PTP Port DS
<b>Context</b>	<a href="#">system sync ptp instance instance-index number port-ds-interface port-index number statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D5, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**tls**

<b>Description</b>	Top-level container for operational commands related to TLS
<b>Context</b>	<a href="#">system tls</a>
<b>Tree</b>	<a href="#">tls</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate-csr**

<b>Description</b>	Generates a certificate signing request and key pair  Fields for the certificate are taken from OpenSSL defaults, with the exception of the common name, which is taken from the system host name and domain name combination.
<b>Context</b>	<a href="#">system tls generate-csr</a>
<b>Tree</b>	<a href="#">generate-csr</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**common-name *string***

<b>Description</b>	The common name to use for the certificate signing request  By default the common name is set to the system host name and domain name combination.
<b>Context</b>	<a href="#">system tls generate-csr common-name <i>string</i></a>
<b>Tree</b>	<a href="#">common-name</a>
<b>String Length</b>	1 to 64

<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**country** *string*

<b>Description</b>	The country name to use for the certificate signing request The expected format is two characters long, e.g. 'US'.
<b>Context</b>	<a href="#">system tls generate-csr country string</a>
<b>Tree</b>	<a href="#">country</a>
<b>String Length</b>	2
<b>Default</b>	US
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**domain-names** *string*

<b>Description</b>	Domain names to add to the SubjectAlternativeName field within the certificate signing request These names are encoded as DNS:<name> within the certificate SAN.
<b>Context</b>	<a href="#">system tls generate-csr domain-names string</a>
<b>Tree</b>	<a href="#">domain-names</a>
<b>String Length</b>	1 to 253
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

**email** *string*

<b>Description</b>	The email address to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr email string</a>
<b>Tree</b>	<a href="#">email</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms



**ip-addresses** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	IP addresses to add to the SubjectAlternativeName field within the certificate signing request These addresses are encoded as IP:<ip> within the certificate SAN.
<b>Context</b>	<a href="#">system tls generate-csr ip-addresses</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> )
<b>Tree</b>	<a href="#">ip-addresses</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

**key-size** *number*

<b>Description</b>	The size of the private key to generate for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr key-size</a> <i>number</i>
<b>Tree</b>	<a href="#">key-size</a>
<b>Range</b>	1024 to 16384
<b>Default</b>	4096
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**key-type** *keyword*

<b>Description</b>	The type of private key to generate for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr key-type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">key-type</a>
<b>Default</b>	rsa
<b>Options</b>	<ul style="list-style-type: none"> <li>rsa</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**locality** *string*

<b>Description</b>	The city or locality to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr locality</a> <i>string</i>

<b>Tree</b>	<a href="#">locality</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **organization *string***

<b>Description</b>	The organization to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr organization <i>string</i></a>
<b>Tree</b>	<a href="#">organization</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **organization-unit *string***

<b>Description</b>	The organization unit to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr organization-unit <i>string</i></a>
<b>Tree</b>	<a href="#">organization-unit</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **spiffe-id *string***

<b>Description</b>	A SPIFFE ID to use for the certificate signing request This ID is in URI form, including the leading 'spiffe://', for example 'spiffe://srlinux.dev/sa/user'.
<b>Context</b>	<a href="#">system tls generate-csr spiffe-id <i>string</i></a>
<b>Tree</b>	<a href="#">spiffe-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **state *string***

<b>Description</b>	The state or province to use for the certificate signing request
--------------------	--

<b>Context</b>	<a href="#">system tls generate-csr state</a> <i>string</i>
<b>Tree</b>	<a href="#">state</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	The type of certificate to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-csr type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	x509
<b>Options</b>	<ul style="list-style-type: none"> <li>• x509</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**generate-self-signed**

<b>Description</b>	<p>Generates a self signed certificate and key pair</p> <p>Fields for the self signed certificate are taken from OpenSSL defaults, with the exception of the common name, which is taken from the system host name and domain name combination.</p>
<b>Context</b>	<a href="#">system tls generate-self-signed</a>
<b>Tree</b>	<a href="#">generate-self-signed</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**common-name** *string*

<b>Description</b>	<p>The common name to use for the certificate signing request</p> <p>By default the common name is set to the system host name and domain name combination.</p>
<b>Context</b>	<a href="#">system tls generate-self-signed common-name</a> <i>string</i>
<b>Tree</b>	<a href="#">common-name</a>
<b>String Length</b>	1 to 64
<b>Configurable</b>	True

**Platforms** Supported on all platforms

### **country** *string*

**Description** The country name to use for the certificate signing request  
The expected format is two characters long, e.g. 'US'.

**Context** [system tls generate-self-signed country string](#)

**Tree** [country](#)

**String Length** 2

**Default** US

**Configurable** True

**Platforms** Supported on all platforms

### **domain-names** *string*

**Description** Domain names to add to the SubjectAlternativeName field within the certificate signing request  
These names are encoded as DNS:<name> within the certificate SAN.

**Context** [system tls generate-self-signed domain-names string](#)

**Tree** [domain-names](#)

**String Length** 1 to 253

**Configurable** True

**Platforms** Supported on all platforms

**Max. Elements** 32

### **duration** *number*

**Description** The time in which the certificate is valid

**Context** [system tls generate-self-signed duration number](#)

**Tree** [duration](#)

**Range** 1 to 3650

**Default** 365

**Units** days

**Configurable** True

**Platforms** Supported on all platforms

**email string**

<b>Description</b>	The email address to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed email string</a>
<b>Tree</b>	<a href="#">email</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**ip-addresses (*ipv4-address* | *ipv6-address*)**

<b>Description</b>	IP addresses to add to the SubjectAlternativeName field within the certificate signing request  These addresses are encoded as IP:<ip> within the certificate SAN.
<b>Context</b>	<a href="#">system tls generate-self-signed ip-addresses (<i>ipv4-address</i>   <i>ipv6-address</i>)</a>
<b>Tree</b>	<a href="#">ip-addresses</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms
<b>Max. Elements</b>	32

**key-size number**

<b>Description</b>	The size of the private key to generate for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed key-size number</a>
<b>Tree</b>	<a href="#">key-size</a>
<b>Range</b>	1024 to 16384
<b>Default</b>	4096
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**key-type keyword**

<b>Description</b>	The type of private key to generate for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed key-type keyword</a>
<b>Tree</b>	<a href="#">key-type</a>
<b>Default</b>	rsa

---

<b>Options</b>	<ul style="list-style-type: none"><li>rsa</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **locality string**

<b>Description</b>	The city or locality to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed locality string</a>
<b>Tree</b>	<a href="#">locality</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **organization string**

<b>Description</b>	The organization to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed organization string</a>
<b>Tree</b>	<a href="#">organization</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **organization-unit string**

<b>Description</b>	The organization unit to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed organization-unit string</a>
<b>Tree</b>	<a href="#">organization-unit</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

### **spiffe-id string**

<b>Description</b>	A SPIFFE ID to use for the certificate signing request This ID is in URI form, including the leading 'spiffe://', for example 'spiffe://srlinux.dev/sa/user'.
--------------------	--

<b>Context</b>	<a href="#">system tls generate-self-signed spiffe-id</a> <i>string</i>
<b>Tree</b>	<a href="#">spiffe-id</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**state** *string*

<b>Description</b>	The state or province to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed state</a> <i>string</i>
<b>Tree</b>	<a href="#">state</a>
<b>String Length</b>	1 to 255
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**type** *keyword*

<b>Description</b>	The type of certificate to use for the certificate signing request
<b>Context</b>	<a href="#">system tls generate-self-signed type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Default</b>	x509
<b>Options</b>	<ul style="list-style-type: none"> <li>• x509</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**server-profile** [name](#) *string*

<b>Description</b>	Enter the server-profile list instance
<b>Context</b>	<a href="#">system tls server-profile name</a> <i>string</i>
<b>Tree</b>	<a href="#">server-profile</a>
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

**name** *string*

<b>Description</b>	Name of the TLS server-profile
--------------------	--------------------------------

<b>Context</b>	<a href="#">system tls server-profile name string</a>
<b>String Length</b>	1 to 247
<b>Configurable</b>	True
<b>Platforms</b>	Supported on all platforms

## certz

<b>Description</b>	Information relating to the active certificates and bundles as provided via Certz  State is provided by the gNSI Certz service, and can be changed using the gNSI.Certz.Rotate RPC
<b>Context</b>	<a href="#">system tls server-profile name string certz</a>
<b>Tree</b>	<a href="#">certz</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## remove

<b>Description</b>	Remove Certz SSL profile from the system.
<b>Context</b>	<a href="#">system tls server-profile name string certz remove</a>
<b>Tree</b>	<a href="#">remove</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## rotate

<b>Description</b>	Perform a rotation of a certificate, trust anchor, or certificate revocation list within Certz SSL profile.
<b>Context</b>	<a href="#">system tls server-profile name string certz rotate</a>
<b>Tree</b>	<a href="#">rotate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3,



7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### certificate string

<b>Description</b>	Base64 encoded certificate to use with the provided or existing private key This includes the '-----BEGIN CERTIFICATE-----' and '-----END CERTIFICATE-----' header and footer
<b>Context</b>	<a href="#">system tls server-profile name string certz rotate certificate string</a>
<b>Tree</b>	<a href="#">certificate</a>
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### created-on number

<b>Description</b>	Sets the created on value for the new policy Value is the number of seconds since the epoch. For reference the current time from the epoch in most Linux distributions can be retrieved via 'date +%s'. You can also select a specific date via 'date -d "2023-03-31" +%s'. If no value is provided the systems current date and time is used.
<b>Context</b>	<a href="#">system tls server-profile name string certz rotate created-on number</a>
<b>Tree</b>	<a href="#">created-on</a>
<b>Units</b>	seconds
<b>Configurable</b>	True
<b>Platforms</b>	7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### crl string

<b>Description</b>	Base64 encoded bundle of certificates to add to the certificate revocation list
<b>Context</b>	<a href="#">system tls server-profile name string certz rotate crl string</a>
<b>Tree</b>	<a href="#">crl</a>
<b>Configurable</b>	True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### key string

**Description** Base64 encoded key to use with the server certificate  
This includes the '-----BEGIN PRIVATE KEY-----', and '-----END PRIVATE KEY-----' header and footer  
The value is hashed, and only the hashed value is kept

**Context** [system tls server-profile name string certz rotate key string](#)

**Tree** [key](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### trust-anchor string

**Description** Base64 encoded certificate chain to use as a trust anchor

**Context** [system tls server-profile name string certz rotate trust-anchor string](#)

**Tree** [trust-anchor](#)

**Configurable** True

**Platforms** 7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### version string

**Description** A version string to store with the policy  
No constraints are applied other than the value must be a string.  
If no value is provided no default is used.

**Context** [system tls server-profile name string certz rotate version string](#)

**Tree** [version](#)

**Configurable** True

---

**Platforms**

7215 IXS-A1, 7220 IXR-D1, 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7220 IXR-H2, 7220 IXR-H3, 7220 IXR-H4, 7250 IXR-10, 7250 IXR-10e, 7250 IXR-6, 7250 IXR-6e, 7250 IXR-X1b, 7250 IXR-X3b, 7730 SXR-1d-32D, 7730 SXR-1x-44S

## 20 tools tunnel

```
tunnel
+ vxlan-tunnel
  + statistics
  + clear
+ vtep address (ipv4-address | ipv6-address)
  + statistics
  + clear
```

## 20.1 tunnel Descriptions

### tunnel

<b>Description</b>	Top-level container for the tunnel table.
<b>Context</b>	<a href="#">tunnel</a>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### vxlan-tunnel

<b>Description</b>	Enter the vxlan-tunnel context
<b>Context</b>	<a href="#">tunnel vxlan-tunnel</a>
<b>Tree</b>	<a href="#">vxlan-tunnel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">tunnel vxlan-tunnel statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### clear

<b>Description</b>	Enter the clear context
<b>Context</b>	<a href="#">tunnel vxlan-tunnel statistics clear</a>
<b>Tree</b>	<a href="#">clear</a>
<b>Configurable</b>	True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **vtep address** (*ipv4-address* | *ipv6-address*)

**Description** The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).

**Context** [tunnel vxlan-tunnel vtep address](#) (*ipv4-address* | *ipv6-address*)

**Tree** [vtep](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **address** (*ipv4-address* | *ipv6-address*)

**Description** The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).

**Context** [tunnel vxlan-tunnel vtep address](#) (*ipv4-address* | *ipv6-address*)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **statistics**

**Description** Enter the statistics context

**Context** [tunnel vxlan-tunnel vtep address](#) (*ipv4-address* | *ipv6-address*) [statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **clear**

**Description** Enter the clear context

**Context** [tunnel vxlan-tunnel vtep address](#) (*ipv4-address* | *ipv6-address*) [statistics](#) [clear](#)

**Tree** [clear](#)

**Configurable** True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4,  
7220 IXR-D5

## 21 tunnel-interface

```

tunnel-interface name string
+ vxlan-interface index number
+ bridge-table
- multicast-destinations
  - destination vtep (ipv4-address | ipv6-address) vni number
  - destination-index number
  - multicast-forwarding keyword
  - not-programmed-reason keyword
  - multicast-limit
    - current-usage number
    - maximum-entries number
- statistics
  - active-entries number
  - failed-entries number
  - mac-type type keyword
    - active-entries number
    - failed-entries number
    - total-entries number
  - total-entries number
- unicast-destinations
  - destination vtep (ipv4-address | ipv6-address) vni number
  - destination-index number
  - mac-table
    - mac address string
    - failed-slots number
    - last-update string
    - not-programmed-reason keyword
    - type keyword
  - statistics
    - active-entries number
    - failed-entries number
    - mac-type type keyword
      - active-entries number
      - failed-entries number
      - total-entries number
    - total-entries number
  - es-destination esi string
  - destination-index number
  - mac-table
    - mac address string
    - failed-slots number
    - last-update string
    - not-programmed-reason keyword
    - type keyword
  - statistics
    - active-entries number
    - failed-entries number
    - mac-type type keyword
      - active-entries number
      - failed-entries number
      - total-entries number
    - total-entries number
  - vtep address (ipv4-address | ipv6-address) vni number
+ egress
+ inner-ethernet-header
  + source-mac keyword

```



```
- used-source-mac string
+ source-ip keyword
+ ingress
+ vni number
- oper-down-reason keyword
- oper-state keyword
+ type identityref
```

## 21.1 tunnel-interface Descriptions

### tunnel-interface *name string*

<b>Description</b>	In the case that the interface is logical tunnel interface, the parameters for the tunnel are specified within this subtree. Tunnel interfaces have only a single logical subinterface associated with them.
<b>Context</b>	<a href="#">tunnel-interface name string</a>
<b>Tree</b>	<a href="#">tunnel-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### name *string*

<b>Description</b>	The name of the tunnel-interface. Valid options are: vxlan<N>, N=0..255
<b>Context</b>	<a href="#">tunnel-interface name string</a>
<b>String Length</b>	6 to 8
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### vxlan-interface *index number*

<b>Description</b>	The list of vxlan-interfaces.
<b>Context</b>	<a href="#">tunnel-interface name string vxlan-interface index number</a>
<b>Tree</b>	<a href="#">vxlan-interface</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5
<b>Max. Elements</b>	16384

### index *number*

<b>Description</b>	The index of the vxlan-tunnel.
--------------------	--------------------------------

<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i>
<b>Range</b>	0 to 999999999
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## bridge-table

<b>Description</b>	Enable the bridge-table context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table</a>
<b>Tree</b>	<a href="#">bridge-table</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## multicast-destinations

<b>Description</b>	Enter the multicast-destinations context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">multicast-destinations</a>
<b>Tree</b>	<a href="#">multicast-destinations</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## destination [vtep](#) (*ipv4-address* | *ipv6-address*) [vni](#) *number*

<b>Description</b>	Enter the destination list instance
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table</a> <a href="#">multicast-destinations</a> <a href="#">destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni</a> <i>number</i>
<b>Tree</b>	<a href="#">destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vtep** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table multicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vni number**

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table multicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**destination-index number**

<b>Description</b>	A system-wide unique identifier of this vxlan destination object (system allocated).
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table multicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">destination-index number</a>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**multicast-forwarding keyword**

<b>Description</b>	The type of multicast data forwarded by this vxlan destination.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table multicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">multicast-forwarding keyword</a>

<b>Tree</b>	<a href="#">multicast-forwarding</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• none</li> <li>• BUM</li> <li>• unknown-unicast</li> <li>• broadcast-mcast</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **not-programmed-reason** *keyword*

<b>Description</b>	The reason why the destination is not programmed in the floodlist
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table multicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• no-destination-index</li> <li>• multicast-limit</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **multicast-limit**

<b>Description</b>	Multicast limits per vxlan interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table multicast-destinations multicast-limit</a>
<b>Tree</b>	<a href="#">multicast-limit</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **current-usage** *number*

<b>Description</b>	Maximum number of multicast vxlan-destinations in use on this vxlan-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table multicast-destinations multicast-limit current-usage</a> <i>number</i>

<b>Tree</b>	<a href="#">current-usage</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### maximum-entries *number*

<b>Description</b>	Maximum number of multicast vxlan-destinations allowed on a vxlan-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table multicast-destinations</a> <a href="#">multicast-limit</a> <a href="#">maximum-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">maximum-entries</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### statistics

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### active-entries *number*

<b>Description</b>	The total number of entries that are active on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on at least one slot
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mac-type** *type keyword*

<b>Description</b>	The type of the mac on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> </ul>

- irb-interface-vrrp

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### active-entries *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### failed-entries *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on at least one slot
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### total-entries *number*

<b>Description</b>	The total number of macs of this type, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False



**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **total-entries** *number*

**Description** The total number of macs, active and inactive, on the sub-interface.

**Context** [tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table statistics total-entries](#) *number*

**Tree** [total-entries](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **unicast-destinations**

**Description** Enter the unicast-destinations context

**Context** [tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table unicast-destinations](#)

**Tree** [unicast-destinations](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **destination** [vtep](#) (*ipv4-address* | *ipv6-address*) [vni](#) *number*

**Description** Enter the destination list instance

**Context** [tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table unicast-destinations destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni](#) *number*

**Tree** [destination](#)

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **vtep** (*ipv4-address* | *ipv6-address*)

**Description** The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).

<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vni number**

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**destination-index number**

<b>Description</b>	A system-wide unique identifier of this vxlan destination object (system allocated).
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a> <a href="#">destination-index number</a>
<b>Tree</b>	<a href="#">destination-index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mac-table**

<b>Description</b>	Enter the mac-table context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <a href="#">ipv4-address</a>   <a href="#">ipv6-address</a> ) <a href="#">vni number</a> <a href="#">mac-table</a>
<b>Tree</b>	<a href="#">mac-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mac address string**

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">tunnel-interface name string vxlan-interface index number bridge-table unicast-destinations destination vtep (ipv4-address   ipv6-address) vni number mac-table mac address string</a>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address string**

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">tunnel-interface name string vxlan-interface index number bridge-table unicast-destinations destination vtep (ipv4-address   ipv6-address) vni number mac-table mac address string</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**failed-slots number**

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
<b>Context</b>	<a href="#">tunnel-interface name string vxlan-interface index number bridge-table unicast-destinations destination vtep (ipv4-address   ipv6-address) vni number mac-table mac address string failed-slots number</a>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**last-update string**

<b>Description</b>	The date and time of the last update of this mac
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<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination</a> <a href="#">vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination</a> <a href="#">vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **type** *keyword*

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination</a> <a href="#">vtep (ipv4-address   ipv6-address)</a> <a href="#">vni number</a> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> </ul>

- proxy-anti-spoof
- reserved
- eth-cfm
- irb-interface-vrrp

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**statistics****Description**

Enter the statistics context

**Context**

[tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table unicast-destinations destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) [statistics](#)

**Tree**[statistics](#)**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**active-entries** *number***Description**

The total number of entries that are active on the sub-interface.

**Context**

[tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table unicast-destinations destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) [statistics active-entries](#) *number*

**Tree**[active-entries](#)**Default**

0

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**failed-entries** *number***Description**

The total number of macs, which have not been programmed on atleast one slot

**Context**

[tunnel-interface name](#) *string* [vxlan-interface index](#) *number* [bridge-table unicast-destinations destination vtep](#) (*ipv4-address* | *ipv6-address*) [vni number](#) [statistics failed-entries](#) *number*

**Tree**[failed-entries](#)

<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### mac-type *type* keyword

<b>Description</b>	the type of the mac on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics mac-type type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### type *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**active-entries** *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics mac-type type</a> <i>keyword</i> <a href="#">total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations destination vtep</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni number</a> <a href="#">statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**es-destination** *esi string*

<b>Description</b>	Enter the es-destination list instance
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination</a> <i>esi string</i>
<b>Tree</b>	<a href="#">es-destination</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**esi** *string*

<b>Description</b>	The 10-byte Ethernet Segment Identifier of the ethernet segment. ESI-0 or MAX-ESI values are not allowed.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination</a> <i>esi string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**destination-index** *number*

<b>Description</b>	A system-wide unique identifier of this vxlan destination object (system allocated).
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination</a> <i>esi string</i> <a href="#">destination-index</a> <i>number</i>
<b>Tree</b>	<a href="#">destination-index</a>



<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### mac-table

<b>Description</b>	Enter the mac-table context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table</a>
<b>Tree</b>	<a href="#">mac-table</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### mac [address](#) *string*

<b>Description</b>	macs learnt on the bridging instance
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac</a> <a href="#">address</a> <i>string</i>
<b>Tree</b>	<a href="#">mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### [address](#) *string*

<b>Description</b>	Enter the address context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac</a> <a href="#">address</a> <i>string</i>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### failed-slots *number*

<b>Description</b>	The list of slot IDs corresponding to the linecards that did not successfully program the mac
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<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">failed-slots</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-slots</a>
<b>Range</b>	1 to 16
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**last-update** *string*

<b>Description</b>	The date and time of the last update of this mac
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">last-update</a> <i>string</i>
<b>Tree</b>	<a href="#">last-update</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**not-programmed-reason** *keyword*

<b>Description</b>	The reason why the mac is not programmed
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <a href="#">not-programmed-reason</a> <i>keyword</i>
<b>Tree</b>	<a href="#">not-programmed-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-limit</li> <li>• failed-on-slots</li> <li>• no-destination-index</li> <li>• reserved</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**type** *keyword*

<b>Description</b>	the type of the mac installed in the fib.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">mac-table mac address</a> <i>string</i> <i>type</i> <i>keyword</i>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> <li>• irb-interface</li> <li>• evpn</li> <li>• evpn-static</li> <li>• irb-interface-anycast</li> <li>• proxy-anti-spoof</li> <li>• reserved</li> <li>• eth-cfm</li> <li>• irb-interface-vrrp</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**statistics**

<b>Description</b>	Enter the statistics context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**active-entries** *number*

<b>Description</b>	The total number of entries that are active on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics active-entries</a> <i>number</i>

<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**failed-entries** *number*

<b>Description</b>	The total number of macs, which have not been programmed on atleast one slot
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**mac-type** *type keyword*

<b>Description</b>	the type of the mac on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i>
<b>Tree</b>	<a href="#">mac-type</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**type** *keyword*

<b>Description</b>	Enter the type context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type</a> <i>keyword</i>
<b>Options</b>	<ul style="list-style-type: none"> <li>• static</li> <li>• duplicate</li> <li>• learnt</li> </ul>

- irb-interface
- evpn
- evpn-static
- irb-interface-anycast
- proxy-anti-spoof
- reserved
- eth-cfm
- irb-interface-vrrp

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **active-entries** *number*

<b>Description</b>	The total number of entries of this type on the sub-interface
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <i>bridge-table unicast-destinations es-destination esi</i> <i>string</i> <a href="#">statistics mac-type type keyword active-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">active-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **failed-entries** *number*

<b>Description</b>	The total number of macs of this type, which have not been programmed on at least one slot
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <i>bridge-table unicast-destinations es-destination esi</i> <i>string</i> <a href="#">statistics mac-type type keyword failed-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">failed-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**total-entries** *number*

<b>Description</b>	The total number of macs of this type , active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics mac-type type keyword total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**total-entries** *number*

<b>Description</b>	The total number of macs, active and inactive, on the sub-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">statistics total-entries</a> <i>number</i>
<b>Tree</b>	<a href="#">total-entries</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vtep** [address](#) (*ipv4-address* | *ipv6-address*) [vni](#) *number*

<b>Description</b>	Add a list entry for vtep
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">vtep address</a> ( <i>ipv4-address</i>   <i>ipv6-address</i> ) <a href="#">vni</a> <i>number</i>
<b>Tree</b>	<a href="#">vtep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
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<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">vtep address (ipv4-address   ipv6-address)</a> <a href="#">vni number</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### vni number

<b>Description</b>	VXLAN Network Identifier of the destination.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">bridge-table unicast-destinations es-destination esi</a> <i>string</i> <a href="#">vtep address (ipv4-address   ipv6-address)</a> <a href="#">vni number</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### egress

<b>Description</b>	Enter the egress context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">egress</a>
<b>Tree</b>	<a href="#">egress</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### inner-ethernet-header

<b>Description</b>	Parameters of the inner VXLAN ethernet payload when the VXLAN tunnel is used in an ip-vrf.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">egress inner-ethernet-header</a>
<b>Tree</b>	<a href="#">inner-ethernet-header</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-mac** *keyword*

<b>Description</b>	VXLAN inner ethernet source mac-address. Present when the VXLAN tunnel is associated with a ip-vrf network-instance.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">egress inner-ethernet-header source-mac</a> <i>keyword</i>
<b>Tree</b>	<a href="#">source-mac</a>
<b>Default</b>	use-system-mac
<b>Options</b>	<ul style="list-style-type: none"> <li>• use-system-mac</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**used-source-mac** *string*

<b>Description</b>	VXLAN inner ethernet source mac-address in use. Present when the VXLAN tunnel is associated with a ip-vrf network-instance.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">egress inner-ethernet-header used-source-mac</a> <i>string</i>
<b>Tree</b>	<a href="#">used-source-mac</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**source-ip** *keyword*

<b>Description</b>	The ip-address that will be used as the source-ip for all vxlan traffic egressing this vxlan-interface.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index</a> <i>number</i> <a href="#">egress source-ip</a> <i>keyword</i>
<b>Tree</b>	<a href="#">source-ip</a>
<b>Default</b>	use-system-ipv4-address
<b>Options</b>	<ul style="list-style-type: none"> <li>• use-system-ipv4-address</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5



**ingress**

<b>Description</b>	Enter the ingress context
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">ingress</a>
<b>Tree</b>	<a href="#">ingress</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**vni number**

<b>Description</b>	Ingress VXLAN Network Identifier of the VXLAN subinterface.  The egress VNI is determined by the static egress-vni configured in the associated destination or by the dynamic egress-vni learned from the control plane.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">ingress vni number</a>
<b>Tree</b>	<a href="#">vni</a>
<b>Range</b>	1 to 16777215
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-down-reason** *keyword*

<b>Description</b>	The reason why the vxlan-interface is oper-down
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">oper-down-reason keyword</a>
<b>Tree</b>	<a href="#">oper-down-reason</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• mac-failed</li> <li>• ingress-hash-failed</li> <li>• egress-hash-failed</li> <li>• other</li> </ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**oper-state** *keyword*

<b>Description</b>	The operational state of the vxlan-interface
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">oper-state keyword</a>
<b>Tree</b>	<a href="#">oper-state</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• up</li><li>• down</li></ul>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**type** *identityref*

<b>Description</b>	The value of this leaf indicates the context in which the vxlan-interface will be used in.
<b>Context</b>	<a href="#">tunnel-interface name</a> <i>string</i> <a href="#">vxlan-interface index number</a> <a href="#">type identityref</a>
<b>Tree</b>	<a href="#">type</a>
<b>Options</b>	<ul style="list-style-type: none"><li>• routed Indicates subinterface is used in a routed context</li><li>• bridged Indicates subinterface is used in a bridged context</li><li>• local-mirror-dest Indicates subinterface is used in a mirroring destination SPAN context</li></ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## 22 tunnel

```
tunnel
+ pseudowire-tunnel
+ tunnel name string
+ allowed-tunnel-types identityref
- index number
- last-change string
- operational-tunnel-id number
- operational-tunnel-type identityref
+ remote-system (ipv4-address-unicast | ipv6-address-unicast-without-local)
+ vxlan-tunnel
+ statistics
+ admin-state keyword
- in-discarded-packets number
- in-octets number
- in-packets number
- last-clear string
- out-octets number
- out-packets number
- vtep address (ipv4-address | ipv6-address)
- index number
- last-change string
- statistics
- in-discarded-packets number
- in-octets number
- in-packets number
- last-clear string
- out-discarded-packets number
- out-octets number
- out-packets number
```

## 22.1 tunnel Descriptions

### tunnel

<b>Description</b>	This model collects all config and state aspects of the tunnel table in SRLinux.
<b>Context</b>	<a href="#">tunnel</a>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### pseudowire-tunnel

<b>Description</b>	Enter the pseudowire-tunnel context
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel</a>
<b>Tree</b>	<a href="#">pseudowire-tunnel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### tunnel *name string*

<b>Description</b>	The name that identifies the remote system of the tunnel
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string</a>
<b>Tree</b>	<a href="#">tunnel</a>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Max. Elements</b>	4096

### *name string*

<b>Description</b>	The name that identifies the remote system
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string</a>
<b>String Length</b>	1 to 255

<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

### **allowed-tunnel-types** *identityref*

<b>Description</b>	List of allowed transport tunnel types for the pseudowire If multiple tunnel types are allowed and there are multiple tunnel types available to the remote system, the router selects the lowest preference tunnel in the tunnel-table.
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name</a> <i>string</i> <a href="#">allowed-tunnel-types</a> <i>identityref</i>
<b>Tree</b>	<a href="#">allowed-tunnel-types</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>• ip-in-ip Tunnels with IP-in-IP encapsulation</li> <li>• gre Tunnels with GRE encapsulation</li> <li>• sr-isis Segment routing using MPLS dataplane, programmed by IS-IS</li> <li>• sr-ospfv2 Segment routing using MPLS dataplane, programmed by OSPFv2</li> <li>• sr-ospfv3 Segment routing using MPLS dataplane, programmed by OSPFv3</li> <li>• te-policy-sr-mpls-colored Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color</li> <li>• te-policy-sr-mpls-uncolored Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.</li> <li>• vxlan Tunnels based on VXLAN encapsulation</li> </ul>
<b>Configurable</b>	True
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S
<b>Min. Elements</b>	1

**index number**

<b>Description</b>	The system allocated ID of the pw tunnel
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string index number</a>
<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**last-change string**

<b>Description</b>	The date and time of the most recent change to the tunnel state
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-tunnel-id number**

<b>Description</b>	The owner-assigned tunnel table index value that identifies the tunnel used by the pseudowire .
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string operational-tunnel-id number</a>
<b>Tree</b>	<a href="#">operational-tunnel-id</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**operational-tunnel-type identityref**

<b>Description</b>	Enter the operational-tunnel-type context
<b>Context</b>	<a href="#">tunnel pseudowire-tunnel tunnel name string operational-tunnel-type identityref</a>
<b>Tree</b>	<a href="#">operational-tunnel-type</a>
<b>Options</b>	<ul style="list-style-type: none"> <li>ip-in-ip Tunnels with IP-in-IP encapsulation</li> </ul>

- gre  
Tunnels with GRE encapsulation
- sr-isis  
Segment routing using MPLS dataplane, programmed by IS-IS
- sr-ospfv2  
Segment routing using MPLS dataplane, programmed by OSPFv2
- sr-ospfv3  
Segment routing using MPLS dataplane, programmed by OSPFv3
- te-policy-sr-mpls-colored  
Tunnel setup with sr-mpls-colored type TE-Policy. Labeled Traffic Engineering Policy with color
- te-policy-sr-mpls-uncolored  
Tunnel setup with sr-mpls-uncolored type TE-Policy. Labeled Traffic Engineering Policy with primary and secondary segment-lists.
- vxlan  
Tunnels based on VXLAN encapsulation

**Configurable**

False

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**remote-system** (*ipv4-address-unicast | ipv6-address-unicast-without-local*)**Description**

The ip-address of the remote system that hosts the remote pseudowire-tunnel

**Context**[tunnel pseudowire-tunnel tunnel name string remote-system](#) (*ipv4-address-unicast | ipv6-address-unicast-without-local*)**Tree**[remote-system](#)**Configurable**

True

**Platforms**

7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5, 7730 SXR-1d-32D, 7730 SXR-1x-44S

**vxlan-tunnel****Description**

Enter the vxlan-tunnel context

**Context**[tunnel vxlan-tunnel](#)**Tree**[vxlan-tunnel](#)**Configurable**

True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

## statistics

**Description** Container for vxlan-tunnel global statistics.

**Context** [tunnel vxlan-tunnel statistics](#)

**Tree** [statistics](#)

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

## admin-state *keyword*

**Description** The configured state of the VXLAN statistics on the router

The default value is disable. No statistics are collected on VXLAN when the admin-state is disable. When enabled, the router starts collecting VXLAN statistics at both, global and VTEP level, however, the total number of layer-2 subinterfaces is decreased. A change in the configuration of this command also resets the statistic counters on layer-2 subinterfaces as a side effect, before resuming the collection of statistics (on these layer-2 subinterfaces).

**Context** [tunnel vxlan-tunnel statistics admin-state keyword](#)

**Tree** [admin-state](#)

**Default** disable

**Options**

- enable
- disable

**Configurable** True

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

## in-discarded-packets *number*

**Description** The total number of discarded ingress VXLAN packets.

Ingress VXLAN packets can be discarded due to one of the following reasons:

**Context** [tunnel vxlan-tunnel statistics in-discarded-packets number](#)

**Tree** [in-discarded-packets](#)

**Default** 0

**Configurable** False



**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **in-octets** *number*

**Description** The total sum of ingress VXLAN octets.

**Context** [tunnel vxlan-tunnel statistics in-octets number](#)

**Tree** [in-octets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **in-packets** *number*

**Description** The total sum of ingress VXLAN packets.  
A packet in this context is an inner frame.

**Context** [tunnel vxlan-tunnel statistics in-packets number](#)

**Tree** [in-packets](#)

**Default** 0

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **last-clear** *string*

**Description** Timestamp of the last time the vxlan tunnel counters were cleared.

**Context** [tunnel vxlan-tunnel statistics last-clear string](#)

**Tree** [last-clear](#)

**String Length** 20 to 32

**Configurable** False

**Platforms** 7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **out-octets** *number*

**Description** The total sum of egress VXLAN octets

**Context** [tunnel vxlan-tunnel statistics out-octets number](#)

**Tree** [out-octets](#)

**Default** 0

<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**out-packets** *number*

<b>Description</b>	The total sum of egress VXLAN packets. . A packet in this context is an inner frame.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel statistics out-packets number</a>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**vtep address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address)</a>
<b>Tree</b>	<a href="#">vtep</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**address** (*ipv4-address* | *ipv6-address*)

<b>Description</b>	The IP address that identifies the remote VXLAN Termination Endpoint (VTEP).
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address)</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

**index** *number*

<b>Description</b>	the next-hop-group-id (system allocated) for resolving the VXLAN termination endpoint
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) index number</a>

<b>Tree</b>	<a href="#">index</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **last-change** *string*

<b>Description</b>	The date and time of the most recent change to the tunnel state
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address)</a> <a href="#">last-change string</a>
<b>Tree</b>	<a href="#">last-change</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L, 7220 IXR-D4, 7220 IXR-D5

### **statistics**

<b>Description</b>	Container for vxlan-tunnel per VTEP (Vxlan Termination EndPoint) statistics.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address)</a> <a href="#">statistics</a>
<b>Tree</b>	<a href="#">statistics</a>
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **in-discarded-packets** *number*

<b>Description</b>	The number of discarded ingress VXLAN packets. Ingress VXLAN packets can be discarded due to one of the following reasons:
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address)</a> <a href="#">statistics in-discarded-packets</a> <a href="#">number</a>
<b>Tree</b>	<a href="#">in-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**in-octets** *number*

<b>Description</b>	The number of octets encapsulated in ingress VXLAN packets.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics in-octets number</a>
<b>Tree</b>	<a href="#">in-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**in-packets** *number*

<b>Description</b>	The number of packets encapsulated in ingress VXLAN packets. A packet in this context is an inner frame.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics in-packets number</a>
<b>Tree</b>	<a href="#">in-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**last-clear** *string*

<b>Description</b>	Timestamp of the last time the vxlan tunnel counters were cleared.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics last-clear string</a>
<b>Tree</b>	<a href="#">last-clear</a>
<b>String Length</b>	20 to 32
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

**out-discarded-packets** *number*

<b>Description</b>	The number of discarded egress VXLAN packets. Egress VXLAN packets can be discarded due to one of the following reasons:
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<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics out-discarded-packets number</a>
<b>Tree</b>	<a href="#">out-discarded-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **out-octets** *number*

<b>Description</b>	The number of octets encapsulated in egress VXLAN packets.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics out-octets number</a>
<b>Tree</b>	<a href="#">out-octets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

### **out-packets** *number*

<b>Description</b>	The number of packets encapsulated in egress VXLAN packets. A packet in this context is an inner frame.
<b>Context</b>	<a href="#">tunnel vxlan-tunnel vtep address (ipv4-address   ipv6-address) statistics out-packets number</a>
<b>Tree</b>	<a href="#">out-packets</a>
<b>Default</b>	0
<b>Configurable</b>	False
<b>Platforms</b>	7220 IXR-D2, 7220 IXR-D2L, 7220 IXR-D3, 7220 IXR-D3L

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