

S Commands

sample

Description	Specifies the MIB object that you want to sample for the trigger that you are configuring. The no version removes the MIB object from the trigger.
Syntax	sample value-id <i>mibId</i> no sample <ul style="list-style-type: none"> ■ <i>mibId</i>—Object ID for the MIB object that you want to sample, for example, 1.3.6.1.2.1.60.1.2.1.1.7
Mode	SNMP Server Event Manager Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

samples-of-history-kept

Description	Sets the number of entries kept in the history table for each RTR operation. The no version restores the default value.
Syntax	samples-of-history-kept <i>samples</i> no samples-of-history-kept <ul style="list-style-type: none"> ■ <i>samples</i>—Number of entries for each RTR index in the history table; default value is 16 for a pathEcho type and 1 for an echo type
Mode	RTR Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

scheduler-profile

Description	Configures a scheduler profile. The router supports up to 1000 scheduler profiles. The no version deletes the scheduler profile.
Syntax	[no] scheduler-profile <i>schedulerProfileName</i> <ul style="list-style-type: none"> ■ <i>schedulerProfileName</i>—Name of the scheduler profile
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Configuring a Scheduler Hierarchy](#)
- [Configuring a Scheduler Profile for a Scheduler Node or Queue](#)
- [Configuring a Basic Parameter Definition for QoS Administrators](#)

scramble

Description Enables cell scrambling on a T3 Frame interface. The **no** version disables cell scrambling on the interface. If you issue this command, be sure to issue the **dsu mode** and **dsu bandwidth** commands. Otherwise, the interface may drop packets unexpectedly.

Syntax [no] scramble

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sdh

Description Specifies that the interface supports SDH. The **no** version restores SONET operation on this interface.

Syntax [no] sdh

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

secret

Description Adds a secret to a user entry in the local user database. The new secret replaces an existing secret or password. The **no** version deletes the secret (or password) from the user entry in the local user database.

Syntax secret [*encryptionType*] *secretText*
no secret

- *encryptionType*—one of the following:
 - 0—Unencrypted secret (the default)
 - 5—MD5-encrypted secret
- *secretText*—Character string that specifies the secret. The string can contain any alphanumeric character, including spaces, up to 64 characters. Secrets are case sensitive.

Mode Local User Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

secure ip classifier-list

- Description** Creates or modifies a secure classifier control list. Use the **not** keyword to deny traffic for a specific protocol, source address, or destination address. Use the **any** keyword to allow traffic to any source or destination address. The **no** version removes the classifier control list.
- Syntax**
- ```
secure ip classifier-list classifierName [traffic-class trafficClassName]
[color { green | yellow | red }] [user-packet-class userPacketClassValue]
[source-route-class routeClassValue] [destination-route-class routeClassValue]
[local { true | false }] [not] { protocol }
[not] { sourceAddress sourceMask | host sourceHostAddress | any } [sourceQualifier]
[not] { destinationAddress destinationMask | host destinationHostAddress | any }
[destinationQualifier] [tcpQualifier] [ip-flags ipFlags]
[ip-frag-offset { eq 0 | eq 1 | gt 1 }]
[precedence precNum | dsField dsFieldNum | tos tosNum]

no secure ip classifier-list classifierName [classifierNumber]
```
- *classifierName*—Name of the classifier control list entry
  - *trafficClassName*—Name of the traffic class to match
  - *green*—Matches packet color to green, indicating a low drop preference
  - *yellow*—Matches packet color to yellow, indicating a medium drop preference
  - *red*—Matches packet color to red, indicating a high drop preference
  - *userPacketClassValue*—User packet value to match; in the range 0–15
  - *routeClassValue*—Value of the route-class; in the range 0–255
  - *local*—Specifies traffic destined for this interface
    - *true*—Matches packets that are locally destined
    - *false*—Matches packets that are not locally destined
  - *not*—Matches any except the immediately following protocol or address
  - *protocol*—Protocol name (IGMP, IP, TCP, or UDP) or number (in the range 0–255) to match
  - *sourceAddress*—Source address to match
  - *sourceMask*—Wild-card mask to apply to the source address
  - *host*—Matches source or destination address as a host
  - *sourceHostAddress*—Source host address to match
  - *any*—Matches any source or destination address
  - *sourceQualifier*—For UDP or TCP protocols, one of the following protocol-specific classifier parameters. See *JUNOS Policy Management Configuration Guide, Chapter 2, Creating Classifier Control Lists for Policies*, for details.
    - *portOperator*—One of the following Boolean operator keywords: **lt** (less than), **gt** (greater than), **eq** (equal to), **ne** (not equal), or **range** (range of port numbers)
    - *range*—Single port number or a range of port numbers
  - *destinationAddress*—Destination address to match
  - *destinationMask*—Wild-card mask to apply to the destination address

- *destinationHostAddress*—Destination host address to match
- *destinationQualifier*—One of the following protocol-specific classifier parameters for destination TCP or UDP ports, ICMP code and type, or IGMP type. The *portOperator* and port range are used with TCP and UDP. The *icmpType*, *icmpCode*, and *igmpType* parameters are used with ICMP and IGMP.
  - *portOperator*—one of the following Boolean operator keywords: **lt** (less than), **gt** (greater than), **eq** (equal to), or **ne** (not equal), or **range** (range of port numbers) (TCP and UDP only)
  - *range*—Single port number or a range of port numbers
  - *icmpType*—ICMP message type (ICMP only)
  - *icmpCode*—ICMP message code (ICMP only)
  - *igmpType*—IGMP message type (IGMP only)
- *tcpQualifier*—TCP flags classification parameters
- *tcpFlag*—For TCP only; a logic equation that specifies flag bit values; ! means logical NOT and & means logical AND; use any of the following flag names:
  - *ack*—0x10
  - *fin*—0x01
  - *push*—0x08
  - *rst*—0x04
  - *syn*—0x02
  - *urgent*—0x20
- *ipFlags*—Logic equation that specifies flag bit values; ! means logical NOT and & means logical AND; use any of the following flag names:
  - *dont-fragment*—0x02
  - *more-fragments*—0x01
  - *reserved*—0x04
- *ip-frag-offset*—Matches the specified IP fragmentation offset; use any of the following:
  - *eq 0*—Equals 0
  - *eq 1*—Equals 1
  - *gt 1*—Greater than 1
- *precNum*—Upper three bits of the ToS byte; in the range 0–7
- *dsFieldNum*—Upper six bits of the ToS byte; in the range 0–63
- *tosNum*—Whole eight bits of the ToS byte; in the range 0–255
- *classifierNumber*—Index of the classifier control list entry to be deleted

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.0.0.

#### Related Topics

- Configuring CLI-Based Mirroring

## secure ip policy-list

---

**Description** Creates or modifies a secure IP policy list. Enters Policy List Configuration mode, enabling you to specify the parameters of the secure IP policy list. If you enter Policy List Configuration mode and then type **exit** without specifying any parameters, the router creates a policy list with a mirror disable rule. Attaching this policy list to an interface results in no packet mirroring. The **no** version removes the specified policy list.

**Syntax** [ no ] secure ip policy-list *policyName*

- *policyName*—Name of the secure IP policy list

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

**Related Topics**

- Configuring CLI-Based Mirroring

## secure l2tp policy-list

---

**Description** Creates or modifies a secure L2TP policy list. Enters Policy List Configuration mode, enabling you to specify the parameters of the secure L2TP policy list. If you enter Policy List Configuration mode and then type **exit** without specifying any parameters, the router creates a policy list with a mirror disable rule. Attaching this policy list to an interface results in no packet mirroring. The **no** version removes the specified policy list.

**Syntax** [ no ] secure l2tp policy-list *policyName*

- *policyName*—Name of the secure L2TP policy list

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

**Related Topics**

- Configuring CLI-Based Mirroring

## send

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**Description** Sends a message to one or more terminals. If you begin the message on the same line as the command, the first character is a delimiter; you must end the message with the same delimiter. If you begin the message on another line, you must enter Ctrl + z to end the message. There is no **no** version.

**Syntax** send { \* | *absoluteLineNumber* | console *consoleLineNumber* | vty *vtyLineNumber* }  
[ *message* ]

- \*—Sends the message to all terminals
- *absoluteLineNumber*—Line number of a terminal to which the message is sent
- *consoleLineNumber*—Line number of a console to which the message is sent
- *vtyLineNumber*—Line number of a vty to which the message is sent
- *message*—Text of message to send; a string of up to 1023 alphanumeric characters

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## send-more-specific-routes-disable

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**Description** Specifies that RIP does not send a more-specific route if it has a less-specific route with any metric. The **no** version restores the default condition, wherein RIP always sends a more-specific route even if a less-specific route with a metric is available.

**Syntax** [ no ] send-more-specific-routes-disable

**Mode** Address Family Configuration, Router Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## send version

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**Description** Restricts the RIP version that the router can send on a remote-neighbor interface. The **no** version sets the remote-neighbor interface back to the default value, sending only RIP version 1.

**Syntax** [ no ] send version [ 1 | 2 | off ]

- 1—Specifies RIP version 1 only
- 2—Specifies RIP version 2 only
- off —Turns reception off

**Mode** Remote Neighbor Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## serial description

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**Description** Assigns a text description or an alias to a serial HDLC interface. Use the **show interfaces serial** command to display the text description. The **no** version removes the description or alias.

**Syntax** serial description *name*  
no serial description

- *name*—Text string or alias of up to 80 characters for the serial interface

**Mode** Interface Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## server-address

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**Description** Sets the DHCP server address that is sent to DHCP clients. The **no** version removes server address.

**Syntax** server-address *address*  
no server-address [ *address* ]

- *address*—DHCP server address

**Mode** DHCP Local Pool Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## server-name

---

**Description** Specifies the hostname expected from the L2TP LNS when you set up a tunnel. The **no** version removes the server name.

**Syntax** server-name *serverName*  
no server-name

- *serverName*—Hostname; can be up to 64 characters in length (no spaces)

**Mode** Domain Map Tunnel Configuration, Tunnel Group Tunnel Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service

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**Description** Adds a specific service name tag to a PPPoE service name table, or modifies the default action for the empty service name tag. For the empty service name tag, you can specify that an AC, such as an E-series router, should ignore (drop), rather than respond to (terminate), all PADI requests from the client containing an empty service name tag. For specific (nonempty) service names, the default action, terminate, is always used. The **no** version restores the default action, terminate, for an empty service name tag, or removes the specified nonempty service name tag from the PPPoE service name table.

**Syntax** service { empty-service-name action *actionValue* | *serviceName* }  
no service { empty-service-name | *serviceName* }

- empty-service-name—Specifies an empty service name tag of zero length, indicating that any service is acceptable; always uses the default action, terminate
- *actionValue*—One of the following actions for the empty service name tag:
  - drop—Specifies that the AC should ignore all PADI requests containing an empty service name tag and not respond with a PPPoE Active Discovery Offer (PADO) packet
  - terminate—Specifies that the AC should respond to a PADI request by sending a PADO packet; this is the default action
- *serviceName*—Name of a nonempty service name tag that specifies a custom value, such as an ISP name or class of service; string of up to 31 alphanumeric characters

**Mode** PPPoE Service Name Table Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service ctrl-x-reboot

---

**Description** Enables the Ctrl + x key combination to reboot the router at all times, except that the key combination has no effect if you are accessing the router through a Telnet session. The **no** version restores the default condition, disabled.

**Syntax** [ no ] service ctrl-x-reboot

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.



## service-description

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|                            |                                                                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Provides a description that is associated with the AAA profile. The description can be used for RADIUS authentication and accounting. The <b>no</b> version negates the command.                            |
| <b>Syntax</b>              | <pre>service-description serviceDescription no service-description</pre> <ul style="list-style-type: none"> <li>■ <i>serviceDescription</i>—Description of the service; maximum of 64 characters</li> </ul> |
| <b>Mode</b>                | AAA Profile Configuration                                                                                                                                                                                   |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                              |

## service dhcp-external

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|                            |                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Enables the DHCP external server. The <b>no</b> version disables the DHCP external server and does not save the previous settings. |
| <b>Syntax</b>              | [ no ] service dhcp-external                                                                                                       |
| <b>Mode</b>                | Global Configuration                                                                                                               |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                     |

## service dhcp-local

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|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Enables the DHCP local server. In standalone mode, the <b>authenticate</b> keyword enables AAA-based authentication for incoming DHCP clients. The <b>no</b> version disables the DHCP local server and does not save the previous settings.                                                                                                                                                                                                                       |
| <b>Syntax</b>              | <pre>[ no ] service dhcp-local [ equal-access   standalone [ authenticate ] ]</pre> <ul style="list-style-type: none"> <li>■ <i>equal-access</i>—Enables the DHCP local server to work with the SDX (formerly SSC) or HTTP local server for non-PPP equal access, the default option</li> <li>■ <i>standalone</i>—Configures the router as a DHCP local server</li> <li>■ <i>authenticate</i>—Enables AAA-based authentication of incoming DHCP clients</li> </ul> |
| <b>Mode</b>                | Global Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                                                                                     |

## service dhcpv6-local

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|----------------------------|------------------------------------------------------------------------------------------|
| <b>Description</b>         | Enables the DHCPv6 local server. The <b>no</b> version disables the DHCPv6 local server. |
| <b>Syntax</b>              | [ no ] service dhcpv6-local                                                              |
| <b>Mode</b>                | Global Configuration                                                                     |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                           |

## service-management install

---

**Description** Installs the specified Service Manager definition. The **no** version removes the specified definition.

**Syntax** [ no ] service-management install *fileName*.mac

- *fileName*—Name of the service definition macro file, including the .mac extension

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 7.2.0.

## service-management owner-session

---

**Description** Activates subscriber service sessions based on the specified owner and owner-generated ID. The **no** version gracefully removes the specified service session for the specified owner session.

Privileged Exec mode creates a dynamic subscriber service session that is deleted after a router reboot. Global Configuration mode creates a persistent service session.

**Syntax** [ no ] service-management owner-session *ownerName* *ownerId* service-session *serviceName* [ service-session-profile *profileName* ]

- *ownerName*—Name of the owner for the owner session; AAA for RADIUS-based subscribers
- *ownerId*—Unique ID that is generated by the owner; Acct-Session-ID for AAA subscriber sessions
- *serviceName*—Name of the service session to use
- *profileName*—Name of the service session profile to use for the service session

**Mode** Global Configuration, Privileged Exec

**Release Information** Command introduced in JUNOS Release 8.0.0.

## service-management service-session-profile

---

**Description** Creates a new Service Manager service session profile or specifies the name of an existing service session profile, then enters Service Session Profile Configuration mode. The **no** version removes the service session profile.

**Syntax** [ no ] service-management service-session-profile *profileName*

- *profileName*—Name of the service session profile

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 7.2.0.

## service-management subscriber-session

**Description** Activates a subscriber session for the specified subscriber. The **no** version gracefully removes the subscriber session and all service sessions associated with this subscriber session.

Privileged Exec mode creates a dynamic subscriber session that is deleted after a router reboot. Global Configuration mode creates a persistent subscriber session.



**NOTE:** Always activate at least one service session for a subscriber session. The ability to create a subscriber session without a service session (by omitting the **service-session** keyword) is not currently supported.

**Syntax** [ no ] service-management subscriber-session *subscriberName*  
 interface *interfaceType* *interfaceSpecifier*

- *subscriberName*—Name of the subscriber for this subscriber session
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

**Mode** Global Configuration, Privileged Exec

**Release Information** Command introduced in JUNOS Release 7.2.0.  
 Privileged Exec mode added in JUNOS Release 8.0.0.

## service-management subscriber-session service-session

**Description** Activates a subscriber session and service session for the specified subscriber. The **no** version gracefully removes all service sessions or the specified service session.

Privileged Exec mode creates a dynamic subscriber session that is deleted after a router reboot. Global Configuration mode creates a persistent subscriber session.

**Syntax** [ no ] service-management subscriber-session *subscriberName*  
 interface *interfaceType* *interfaceSpecifier* service-session *serviceName* |  
 [ service-session-profile *profileName* ]

- *subscriberName*—Name of the subscriber for this subscriber session
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *serviceName*—Name of the service session to use for this subscriber session
- *profileName*—Name of the service session profile to use for this service session

**Mode** Global Configuration, Privileged Exec

**Release Information** Command introduced in JUNOS Release 7.2.0.  
 Privileged Exec mode added in JUNOS Release 8.0.0.

## service manual-commit

---

**Description** Stops the router from automatically saving configuration changes to nonvolatile storage. Places the router into Manual Commit mode; this mode has no effect on the CLI prompt. Causes an immediate save of configuration data not yet committed to nonvolatile storage. If you issue this command while high availability is initializing, the CLI notifies you of the state and requests that you try again later. The **no** version returns the E-series router to Automatic Commit mode (with no effect on the CLI prompt).

**Syntax** [ no ] service manual-commit

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service password-encryption

---

**Description** Directs the router to encrypt passwords that are saved in the configuration file. The command should be used as a simple cipher to prevent unauthorized users from viewing passwords. The **no** version removes the encryption assignment.

**Syntax** [ no ] service password-encryption

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service show-config

---

**Description** Formats **show configuration** command output. The **no** version reverts the show configuration command format to its default (format 1).

**Syntax** service show-config format { 1 | 2 }

no service show-config format

- 1—Format of the original **show configuration** command output
- 2—Format enhancement to the **show configuration** command that can significantly reduce the amount of time it takes to generate and display output for configurations that contain three or more virtual routers and a large number of interfaces

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service timestamps

---

**Description** Formats timestamps associated with log messages. The **no** version removes timestamps from log messages.

**Syntax** service timestamps log datetime [ show-timezone [ localtime ] ]  
 no service timestamps [ log ]

- log—Indicates that a timestamp will appear on log messages
- datetime—Displays the date and time
- show-timezone—Displays the time zone
- localtime—Displays the timestamp in local time

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## service unattended-password-recovery

---

**Description** Allows you to delete all passwords and secrets from the console without being physically present at the router. When executed, this command changes the behavior of the **erase secrets** command, which will not take any parameters and will not be available through a vty session. The **no** version reverts **erase secrets** to factory default settings.

**Syntax** [ no ] service unattended-password-recovery

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## session-timeout

---

**Description** Defines the ANCP session timeout value (in seconds). The **no** version reverts the session timeout to its default setting (25 seconds).

**Syntax** [ no ] session-timeout *timeOutValue*

- *timeOutValue*—Session timeout in seconds, in the range 1–25; default value is 25 seconds

**Mode** L2C Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set

---

**Description** Performs an SNMP set operation under certain event conditions. The **no** version removes the set operation.

**Syntax** set object  
{ context-name *contextName* [ wildcard ] | id *mibId* | value *objectValue* }  
no set [ object { context-name | id | value } ]

- *contextName*—Context name of the MIB object SNMP agent
- wildcard—Specifies the context name as a wildcard
- *mibId*—MIB object ID that you want to set; for example, 1.3.6.1.2.1.60.1.2.1.1.7
- *objectValue*—Value to which you want to set the configured MIB object

**Mode** SNMP Event Manager Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set admission-bandwidth

---

**Description** Sets a specific multicast bandwidth for admission control or defines the bandwidth as adaptive (automatically sensed). The **no** version removes the set clause from a route map.

**Syntax** set admission-bandwidth { *bandwidthValue* | adaptive }  
no set admission-bandwidth

- *bandwidthValue*—Number in the range 0–4294967259 kilobits per second used for admission control
- adaptive—Defines the admission bandwidth as being automatically sensed

**Mode** Route Map Configuration

**Release Information** Command introduced in JUNOS Release 7.1.0.  
**adaptive** keyword added in JUNOS Release 7.2.0.

## set as-path prepend

---

**Description** Prepends one or more AS numbers or a list of AS numbers to the AS path for BGP routes. The **no** version removes the set clause from a route map.

**Syntax** set as-path prepend { list *listName* | *asPathNumber* [ *asPathNumber* ]\* }  
no set as-path prepend

- *listName*—Name of a list of AS path numbers; string of up to 32 characters
- *asPathNumber*—Number, in the range 1–65535, that appends the string following the keyword **prepend** to the AS path of the route that is matched by the route map. Applies to outbound BGP route maps.
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set automatic-tag

---

**Description** Automatically computes the tag value. The **no** version removes the set clause from a route map.

**Syntax** [ no ] set automatic-tag

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set comm-list delete

---

**Description** Removes communities specified by the community list from the community attribute of routes matching the route map. The **no** version removes the set clause from a route map.

**Syntax** set comm-list { *communityList* | *regularExpression* } delete  
no set comm-list

- *communityList*—Community list identifier; a string of up to 32 characters
- *regularExpression*—Regular expression that matches the community

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set community

---

**Description** Sets the BGP community attribute to one or more community numbers or a list of community numbers. The **no** version removes the set clause from a route map.

**Syntax** set community { list *communityListName* [ additive ] | none }  
set community { *communityNumber* | *knownCommunity* | *asCommunNumber* }  
[ *communityNumber* | *knownCommunity* | *asCommunNumber* ]\* [ additive ]  
no set community

- *communityListName*—Name of a community; a string of up to 32 characters
- additive—Adds the community number to the community list
- none—Removes the community attribute
- *communityNumber*—Number, in the range 1–4294967295, that specifies the community number
- *knownCommunity*—Any of the following well-known communities; the Internet community is not an option:
  - local-as—Prevents advertisement outside of the local AS
  - no-advertise—Prevents advertisement to any peer
  - no export—Prevents advertisement beyond the BGP confederation boundary
- *asCommunNumber*—AS community number in the format *AA:NN*:
  - *AA*—Number, in the range 1–65535, that identifies an AS
  - *NN*—Number, in the range 1–65535, that uniquely identifies a community within an AS
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.



## set dampening

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|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Enables route flap dampening and optionally specifies dampening parameters for routes passing through the route map. The <b>no</b> version removes the set clause from a route map.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Syntax</b>              | <pre>set dampening halfLife reuse suppress maxSuppressTime [ halfLifeUnreachable ]</pre> <pre>no set dampening</pre> <ul style="list-style-type: none"> <li>■ <i>halfLife</i>—Half-life period in minutes, in the range 1–45; default value is 10. When a BGP route has been assigned a penalty, the penalty is decreased by half after each half-life period. Each time a route flaps, the router configured for route flap dampening assigns the route a penalty. Penalties are cumulative. BGP stores the penalty for all reachable and unreachable routes that have experienced recent flaps.</li> <li>■ <i>reuse</i>—Reuse limit in the range 1–20000; default value is 750. As the penalty for a flapping route decreases and falls below this reuse limit, the route is unsuppressed. That is, the route is added back to the BGP table and used for forwarding.</li> <li>■ <i>suppress</i>—Suppress limit in the range 1–20000; default value is 2000; a route is suppressed when its penalty exceeds this limit</li> <li>■ <i>maxSuppressTime</i>—Maximum suppression time in minutes, in the range 1–255; default value is 60; maximum amount of time a route can be suppressed</li> <li>■ <i>halfLifeUnreachable</i>—Alternate half-life period in minutes for unreachable routes; a number in the range 1–45; default value is 20. If you do not specify this value, the router uses the same half-life period for both reachable and unreachable routes.</li> </ul> |
| <b>Mode</b>                | Route Map Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## set dhcp relay

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|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b> | <p>When used without any optional keywords, creates and enables DHCP relay in the current virtual router independent of any DHCP servers.</p> <p>When used with optional keywords, adds a new DHCP/BOOTP server and specifies that the E-series router is either a DHCP relay or DHCP relay proxy between the DHCP client and DHCP server. Optionally, configures the DHCP relay agent, including specifying the DHCP relay agent information (option 82) that is included in all packets forwarded to the DHCP server.</p> <p>If you issue the <b>set dhcp relay</b> command when a local server has been configured, the local server is deactivated.</p> <p>The <b>no</b> version used without other keywords deletes the DHCP relay agent and its configuration from the virtual route. The <b>no</b> version used with optional keywords removes the specified server or disables the specified relay agent configuration.</p> |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**NOTE:** The **set dhcp relay agent** command, when used to configure option 82 suboptions, is a legacy command, which JUNOS software continues to support to provide backward-compatibility for existing scripts. We recommend that you use the **dhcp relay agent sub-option** command for new option 82 suboption configurations.

---

**Syntax** To create the DHCP relay independent of any DHCP servers and to explicitly delete the DHCP server  
[ no ] set dhcp relay

To create and disable the DHCP relay for a specific DHCP server

```
set dhcp relay { dhcpServerAddress [proxy] | agent [circuit-ID-only | remote-ID-only] |
inhibit-access-route-creation | discard-access-routes
{ interfaceType interfaceSpecifier | all } }
```

```
no set dhcp relay { dhcpServerAddress | agent | inhibit-access-route-creation }
```

- *dhcpServerAddress*—IP address of the DHCP server
- proxy—Specifies that the router is a DHCP relay proxy between the DHCP client and DHCP server; if omitted, the router functions as a DHCP server
- agent—Adds the agent information suboptions (circuit-ID and remote-ID) to every packet the router relays from a DHCP client to a DHCP server
- circuit-ID-only—Specifies circuit ID suboption (suboption 1) only
- remote-ID-only—Specifies remote-ID suboption (suboption 2) only
- inhibit-access-route-creation—Specifies that access routes are not installed
- discard-access-routes—Removes existing access routes from the routing table and from NVS
- *interfaceType*—Interface type whose access routes should be discarded; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- all—Removes all existing access routes

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
Command used without any keywords introduced in JUNOS Release 8.2.0.

## set dhcp relay agent sub-option

---

**Description** Configures DHCP relay and DHCP relay proxy to add values into the DHCP relay agent information option (option 82) of the packets sent to a DHCP server. The **no** version restores the default configuration, in which the specified values are not relayed to the DHCP server.



**NOTE:** We recommend that you use this command for new option 82 suboption configurations. However, JUNOS software continues to support the **set dhcp relay agent** command, with option 82 suboptions, to provide backward-compatibility for existing scripts.

**Syntax** set dhcp relay agent sub-option { circuit-id | remote-id | vendor-specific  
{ layer2-circuit-id | user-packet-class } }  
no set dhcp relay agent sub-option { circuit-id | remote-id | vendor-specific

[ layer2-circuit-id | user-packet-class ] }

- circuit-id—Specifies the Agent Circuit ID suboption (suboption 1)
- remote-id—Specifies the Agent Remote ID suboption (suboption 2)
- vendor-specific—Specifies the Vendor-Specific suboption (suboption 9)
- layer2-circuit-id—Specifies the SVLAN ID or VLAN ID or both for Ethernet interfaces or the VPI/VCI for ATM 1483 interfaces
- user-packet-class—Specifies the user packet class, whose value is configured by the JUNOS software layer 2 policy application

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.0.0.

## set dhcp relay assign-giaddr-source-ip

**Description** Configures DHCP relay and DHCP relay proxy to assign the gateway IP address (giaddr) to the source IP address of traffic they send to DHCP servers. The **no** version restores the default, in which the DHCP relay and DHCP relay proxy do not assign the giaddr to the source IP address.

**Syntax** [ no ] set dhcp relay assign-giaddr-source-ip

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 7.1.0.

## set dhcp relay broadcast-flag-replies

**Description** Configures DHCP relay and DHCP relay proxy to use the setting of the broadcast flag in the DHCP request packet to control how DHCP Offer reply packets and ACK and NAK reply packets are transmitted to DHCP clients during the discovery process. If the broadcast flag is set in the request packet, DHCP relay and DHCP relay proxy broadcast DHCP reply packets to clients. If the broadcast flag is not set in the request packet, DHCP relay and DHCP relay proxy use the layer 2 unicast transmission method to send DHCP reply packets using the client's layer 2 (MAC) address and layer 3 (IP) unicast address. The **no** version causes the router not to use the broadcast flag setting and restores the default behavior, which broadcasts DHCP Offer reply packets and ACK and NAK reply packets to all clients during the discovery process.



**NOTE:** The **set dhcp relay broadcast-flag-replies** command and the **set dhcp relay layer2-unicast-replies** command are mutually exclusive. If you attempt to issue the **set dhcp relay broadcast-flag-replies** command when the **set dhcp relay layer2-unicast-replies** command is already in effect, the operation fails and the router displays an error.

**Syntax** [ no ] set dhcp relay broadcast-flag-replies

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.1.0.

## set dhcp relay giaddr-selects-interface

---

**Description** Configures DHCP relay to use information in the giaddr in the DHCP ACK packets that are generated by the server and destined for the DHCP client. The DHCP server uses this information to determine the primary interface that is used to optionally build dynamic subscriber interfaces.

The **no** version restores the default that builds dynamic subscriber interfaces on the IP interface on which DHCP client discover packets are received.

**Syntax** [ no ] set dhcp relay giaddr-selects-interface

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.0.0.

## set dhcp relay layer2-unicast-replies

---

**Description** Configures DHCP relay and DHCP relay proxy to use the optional layer 2 unicast and layer 3 broadcast transmission method to transmit DHCP Offer reply packets and ACK reply packets to DHCP clients during the discovery process. The **no** version restores the default method that broadcasts DHCP Offer reply packets and ACK reply packets to all DHCP clients during the discovery process.



**NOTE:** The **set dhcp relay layer2-unicast-replies** command and the **set dhcp relay broadcast-flag-replies** command are mutually exclusive. If you attempt to issue the **set dhcp relay layer2-unicast-replies** command when the **set dhcp relay broadcast-flag-replies** command is already in effect, the operation fails and the router displays an error.

**Syntax** [ no ] set dhcp relay layer2-unicast-replies

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 7.2.0.

## set dhcp relay options

---

**Description** Configures the relay agent option 82 information that the router adds to DHCP packets before it relays the packets to the DHCP server. You can add either the E-series hostname or the virtual router name to the front of the Circuit-Id field. You cannot add both hostname and virtual router name. The last option specified is the one in use. You can also strip the subinterface ID from the Interface-Id field. The **no** version returns to the default, in which no information is added to the Circuit-Id field and/or the subinterface ID is not stripped from the interface string.

**Syntax** `set dhcp relay options { hostname | vname | exclude-subinterface-id }`  
`no set dhcp relay options [ hostname | vname | exclude-subinterface-id ]`

- **hostname**—Adds the router's hostname to the front of the Circuit-Id field; the hostname is separated from the circuit information by a colon
- **vname**—Adds the router's virtual router name to the front of the Circuit-Id field; the virtual router name is separated from the circuit information by a colon
- **exclude-subinterface-id**—Strips the subinterface ID from the Interface-Id field

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set dhcp relay override

---

**Description** Configures DHCP relay to override the relay agent option 82 or giaddr values in packets destined for a DHCP server. The **no** version returns to the default, in which the option 82 or giaddr value is not overridden.

**Syntax** `[ no ] set dhcp relay override { agent-option | giaddr }`

- **agent-option**—Overrides the option 82 information
- **giaddr**—Overrides giaddr

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set dhcp relay preserve-trusted-client-option

---

**Description** Configures DHCP relay and DHCP relay proxy to prevent option 82 information from being stripped from packets destined for a trusted client. The **no** version restores the default, in which the option 82 information is stripped from the packets.

**Syntax** `[ no ] set dhcp relay preserve-trusted-client-option`

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 7.1.0.

## set dhcp relay proxy send-first-offer

---

**Description** Configures the DHCP relay proxy to immediately send the first DHCP offer it receives from any DHCP server to the DHCP client. The **no** version restores the default value, in which DHCP relay proxy sends the single most appropriate address offer it receives from multiple DHCP servers.

**Syntax** [ no ] set dhcp relay proxy send-first-offer

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.0.0.

## set dhcp relay proxy timeout

---

**Description** Sets the time that the DHCP relay proxy waits for a renewal message from the DHCP client after a reboot or switchover occurs. The **no** version restores the default value.

**Syntax** set dhcp relay proxy timeout *hours*

no set dhcp relay proxy timeout

- *hours*—Number of hours for the timeout, in the range 1–168 (1 hour to 7 days); default value is 72 hours

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set dhcp relay trust-all

---

**Description** Enables the DHCP relay trust-all method. When the trust-all method is enabled, the DHCP relay processes packets that are destined for a DHCP server as if they are from trusted sources. The **no** version restores the default, which disables the trust-all method.

**Syntax** [ no ] set dhcp relay trust-all


**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set dhcp vendor-option

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Configures vendor-option strings that control DHCP client traffic. Creates DHCP vendor-option servers by configuring DHCP relay to match DHCP option 60 strings and to specify the action the router takes when it receives DHCP option 60 strings. The <b>no</b> version disables the setting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Syntax</b>              | <p>To set the default action to take when the option 60 string does not match a configured vendor-option string:</p> <pre>[ no ] set dhcp vendor-option default [ drop   local-server   proxy-client   relay address   relay-server-list ]</pre> <p>To set the action to take when the option 60 string matches a configured vendor-option string:</p> <pre>[ no ] set dhcp vendor-option { equals   starts-with } string [ local-server   relay address ]</pre> <ul style="list-style-type: none"> <li>■ <b>drop</b>—Discards packets</li> <li>■ <b>local-server</b>—Forwards packets to the DHCP local server</li> <li>■ <b>proxy-client</b>—Forwards packets to the DHCP proxy client server</li> <li>■ <b>address</b>—IP address of the vendor-option server to which packets are forwarded</li> <li>■ <b>relay-server-list</b>—Forwards packets to all non-vendor option DHCP servers. The relay-server-list consists of all non-vendor option servers. Non-vendor option servers are those servers that are configured with the <b>set dhcp relay</b> command but not with the <b>set dhcp vendor-option</b> command.</li> <li>■ <b>equals</b>—Configures a string that must be matched exactly for option 60 processing</li> <li>■ <b>starts-with</b>—Configures the string that is matched from left-to-right for option 60 processing</li> <li>■ <b>string</b>—Option 60 string to match; up to 254 hexadecimal characters</li> </ul> |
| <b>Mode</b>                | Global Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Release Information</b> | Command introduced in JUNOS Release 8.2.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## set distance

|                                                                                     |                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>                                                                  | Configures an administrative distance to apply to routes that match the route map. The <b>no</b> version removes the set clause from a route map.                                                                                                                                                                      |
|  | <p><b>NOTE:</b> Setting a distance in a route map is useful only when it is set on a route being installed into the routing table. Distance is used to establish preference between routes to the same prefix to identify the best route to that prefix. Setting distance in any other circumstance has no effect.</p> |
| <b>Syntax</b>                                                                       | <pre>set distance distance</pre> <pre>no set distance</pre> <ul style="list-style-type: none"> <li>■ <b>distance</b>—Administrative distance in the range 0–255</li> </ul>                                                                                                                                             |
| <b>Mode</b>                                                                         | Route Map Configuration                                                                                                                                                                                                                                                                                                |
| <b>Release Information</b>                                                          | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                         |

## set extcommunity

---

**Description** Sets the BGP extended communities attribute. The **no** version removes the set clause from a route map.

**Syntax** set extcommunity  
{ rt *extCommValue* [ *extCommValue* ]\* [ additive ] } | { soo *extCommValue* }  
no set extcommunity

- **rt**—Specifies a route-target extended community, which consists of one or more routers that can receive a set of routes advertised by BGP that carry the extended-community attribute
- **soo**—Specifies a site-of-origin extended community, which consists of one or more routers that inject into BGP a set of routes that carry the extended-community attribute
- ***extCommValue***—Number identifying the extended community in one of the following formats:
  - *AS:nn*—Autonomous system number, in the range 1–65535, followed by an integer in the range 1–4294967295; for example, 320:72358
  - *AS:nn*—Autonomous system number, in the range 1–4294967295 followed by an integer in the range 1–65535; for example, 84511:45
  - *ipAddress:nn*—Dotted decimal IP address followed by an integer in the range 1–65535; for example, 10.10.21.5:1256
- **\***—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- **additive**—Adds the specified extended communities to any previously configured for the attribute; if omitted, the specified extended communities replace any previously configured for the attribute

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set ip interface-profile

---

**Description** Specifies a dynamic IP interface profile that is used in the route map. The **no** version removes the interface profile from the route map.

**Syntax** set ip interface-profile *profileName*  
no set ip interface-profile

- ***profileName***—Name of the dynamic profile

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.



## set ip next-hop

**Description** Indicates where to send packets that pass a match clause of a route map for policy routing. The **no** version removes the set clause from a route map.



Beginning with JUNOS Release 7.1.0, this command is not supported for route maps used by the **table-map** command.

**Syntax** set ip next-hop { *ipAddress* | interface *interfaceType* *interfaceSpecifier* | *peerAddress* }  
no set ip next-hop [ *ipAddress* | *peerAddress*]

- *ipAddress*—IP address of next hop to which packets are sent; does not need to be an adjacent router
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *peerAddress*—On outbound route maps, disables the next hop-calculation by setting the next hop to the IP address of the BGP speaker; on inbound route maps, overrides any third-party next-hop configuration by setting the next hop to the IP address of the peer

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set ip service-profile

**Description** Specifies the name of a subscriber's service profile that is used in the route map. The **no** version removes the service profile from the route map.

**Syntax** set ip service-profile *profileName*  
no set ip service-profile

- *profileName*—Name of service profile

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set ip source-prefix

---

**Description** Specifies a source address range that will be inserted into a specific interface and the action to take with the range. The **no** version removes the source address range from the route map.

**Syntax** [ no ] set ip source-prefix *ipAddress ipMask* { deny | primary }

- *ipAddress*—IP address for the range
- *ipMask*—IP address mask for the range
- deny—Drops the addresses that appear in the source address range
- primary—Associates the source prefix with the primary IP interface

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set ipv6 next-hop

---

**Description** Indicates where to send packets that pass a match clause of a route map for IPv6 policy routing. The **no** version removes the set clause from a route map.

**Syntax** [ no ] set ipv6 next-hop *ipv6Address* [ *localAddress* ]

- *ipv6Address*—IPv6 address of next hop to which you want to send packets; does not need to be an adjacent router
- *localAddress*—IP address of the specific interface

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

**set level**

---

**Description** Specifies where to import routes when all of a route map's match criteria are met. The **no** version removes the set clause from a route map.

**Syntax** `set level atLevel`  
`no set level`

- *atLevel*—Specifies one of the following levels:
  - level-1—Imports routes into a level 1 area
  - level-1-2—Imports routes into a level 1 and a level 2 area
  - level-2—Imports routes into a level 2 subdomain
  - stub-area—Imports routes into an OSPF NSSA area
  - backbone—Imports routes into an OSPF backbone area

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

**set local-preference**

---

**Description** Specifies a preference value for the AS path. The **no** version removes the set clause from a route map.

**Syntax** `set local-preference value`  
`no set local-preference`

- *value*—Preference number, in the range 0–4294967295

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set metric

---

**Description** Modifies the metric value (for BGP, the MED) for a route that matches the route map by applying a relative or absolute metric. The **no** version removes the set clause from a route map.



**NOTE:** You cannot have an absolute and a relative metric within the same route map sequence. Issuing either command overrides any previously configured metric in the route map.

---

**Syntax** set metric [ *+relValue* | *-relValue* | *absValue* ]  
no set metric

- *+* —Specifies that the value is added to the metric for routes matching the route map; immediately precedes the metric value with no intervening space
- *-* —Specifies that the value is subtracted from the metric for routes matching the route map; immediately precedes the metric value with no intervening space
- *relValue*—Number, in the range 0–4294967295
- *absValue*—Number, in the range 0–4294967295

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set metric-type

---

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Sets the metric type for the destination routing protocol. The <b>no</b> version removes the set clause from a route map.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Syntax</b>              | <pre>set metric-type <i>atMetric</i> no set metric-type</pre> <ul style="list-style-type: none"> <li>■ <i>atMetric</i>—Specifies the metric type from the following choices:           <p>For BGP:</p> <ul style="list-style-type: none"> <li>■ external—Reverts to the normal BGP rules for propagating the MED; this is the BGP default</li> <li>■ internal—Sets the MED of a received route that is being propagated to an external peer equal to the IGP cost of the indirect next hop</li> </ul> <p>For IS-IS:</p> <ul style="list-style-type: none"> <li>■ external—Only the metric of the route itself is considered for comparison</li> <li>■ internal—Both the metric of the route and the cost to the router that advertised the route are considered for comparison; this is the IS-IS default</li> </ul> <p>For OSPF:</p> <ul style="list-style-type: none"> <li>■ 1—Cost of the external routes is equal to the sum of all internal costs and the external cost</li> <li>■ 2—Cost of the external routes is equal to the external cost alone; this is the OSPF default</li> </ul> </li> </ul> |
| <b>Mode</b>                | Route Map Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## set mpls-label

---

|                            |                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Configures BGP to advertise prefixes that match the route map as labeled prefixes. The <b>no</b> version removes the configuration. |
| <b>Syntax</b>              | <pre>[ no ] set mpls-label</pre>                                                                                                    |
| <b>Mode</b>                | Route Map Configuration                                                                                                             |
| <b>Release Information</b> | Command introduced in JUNOS Release 7.1.0.                                                                                          |

## set origin

---

**Description** Sets the BGP origin of an advertised route. The **no** version removes the set clause from a route map.

**Syntax** set origin *atOrigin*  
no set origin

- *atOrigin*—Specifies the origin from the following choices:
  - *egp*—Remote exterior gateway protocol
  - *igp*—Local interior gateway protocol
  - *incomplete*—Origin unknown

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set-overload-bit

---

**Description** Sets the overload bit, indicating to other IS-IS routers not to use this router as an intermediate hop in their SPF calculations. The **no** version restores the default value, clearing the overload bit.

**Syntax** [ no ] set-overload-bit [ on-startup *seconds* | on-startup wait-for-bgp [ *bgpSeconds* ] ]

- *on-startup*—Sets the overload bit only after a system reload; prevents other routers from routing through this router before it is fully operational
- *seconds*—Period after the reload during which the overload bit is set, in the range 5–86400 seconds; the overload bit is cleared when the period expires
- *wait-for-bgp*—Specifies that the overload bit is not cleared until BGP has completed convergence
- *bgpSeconds*—Maximum period to wait for BGP to converge, in the range 5–86400 seconds with a default value of 600 seconds; the overload bit is cleared when the period expires

**Mode** Router Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set priority

---

**Description** Configures a priority value for the <S, G> data stream. Dynamic multicast admission control enables only prioritized groups to join the interface after the configured priority limit is reached on the physical port. The system records the priority when a new <S, G> entry is created. The **no** version removes the priority value.

**Syntax** set priority *priorityValue*  
no set priority

- *priorityValue*—Priority value for the <S, G> data stream; the default is 0

**Mode** Route Map Configuration

**Release Information** Command introduced in JUNOS Release 8.2.0.

## set qos-bandwidth

---

**Description** Sets a multicast bandwidth for QoS adjustment or defines the bandwidth as adaptive (automatically sensed). The **no** version removes the set clause from a route map.

**Syntax** set qos-bandwidth { *bandwidthValue* | adaptive }  
no set qos-bandwidth

- *bandwidthValue*—Number, in the range 0–4294967259 kilobits per second, used for QoS adjustment
- *adaptive*—Defines the QoS bandwidth as being automatically sensed

**Mode** Route Map Configuration

**Release Information** Command introduced in JUNOS Release 7.1.0.  
**adaptive** keyword added in JUNOS Release 7.2.0.

## set route-class

---

**Description** Sets the route class attribute for a route map. The **no** version deletes the route class attribute.

**Syntax** set route-class *routeClass*  
no set route-class

- *routeClass*—Value in the range 0–255

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set route-type

---

**Description** Sets routes of the specified type. The **no** version removes the set clause from a route map.

**Syntax** set route-type { internal | internal-intra | internal-inter | external }  
no set route-type

- internal—Internal route (including OSPF intra-area and interarea)
- internal-intra—Intra-area route
- internal-inter—Interarea route
- external—External route (BGP and OSPF type 1/2)

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set tag

---

**Description** Sets the tag value of the destination routing protocol. The **no** version removes the set clause from a route map.

**Syntax** set tag *tagValue*  
no set tag

- *tagValue*—Preference number, in the range 0–4294967295

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## set threshold

---

**Description** Configures a threshold value for multicast VPN applications. The **no** version removes the threshold value.

**Syntax** set threshold *thresholdValue*  
no set threshold

- *thresholdValue*—Threshold value for multicast VPN applications

**Mode** Global Configuration

**Release Information** Command introduced in JUNOS Release 8.2.0.



## set weight

---

**Description** Specifies the BGP weight for the routing table. Overrides the weights assigned by using the **neighbor weight** and **neighbor filter-list** commands. The **no** version removes the set clause from a route map.

**Syntax** [ no ] set weight *value*  
no set weight

- *value*—Weight value in the range 0–4294967295

**Mode** Route Map Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

## shadow-node

---

**Description** Specifies that a shadow node be configured for each interface of the given interface type. The **no** version removes this rule from the QoS profile.

**Syntax** [ no ] *typeOfInterface* shadow-node [ group *trafficClassGroup* | scheduler-profile *schedulerProfileName* ]\*

- *typeOfInterface*—Interface types for shadow nodes to be configured: atm, atm-vc, atm-vp, bridge, ethernet, fr-vc, ip, ip-tunnel, ipv6, l2tp-session, l2tp-tunnel, lsp, serial, server-port, svlan, vlan
- *trafficClassGroup*—Name of the traffic-class group
- *schedulerProfileName*—Name of the scheduler profile
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line

**Mode** QoS Profile Configuration

**Release Information** Command introduced in JUNOS Release 8.0.0.

### Related Topics

- Configuring Shadow Nodes

## shaping-rate

---

**Description** Sets the shaping rate and burst size. The **no** version deletes the shaping rate.

**Syntax** `shaping-rate shapingRate [ operator operandValue ]* [ bps | kbps ]`  
`[ burst burstSize [ milliseconds | bytes ] ]`  
`shaping-rate operandValue [ operator operandValue ]* [ bps | kbps ]`  
`no shaping-rate`

- *shapingRate*—Constant shaping rate in bits per second; in the range 1000–10000000000 (1 Kbps–1000 Kbps)
- *operator*—Mathematical function
- *operandValue*—Input for the operator; can be a QoS parameter definition name or an integer
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *bps*—Specifies shaping rate in bits per second
- *kbps*—Specifies shaping rate in kilobits per second
- *burstSize*—Number, in the range 0–522240 (0–510 KB); 0 enables the router to select an applicable default value
- *milliseconds*—Specifies burst size in milliseconds
- *bytes*—Specifies burst size in bytes

**Mode** Scheduler Profile Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**milliseconds** and **bytes** keywords added in JUNOS Release 7.1.0.  
**bps** and **kbps** keywords added in JUNOS Release 8.0.0.

### Related Topics

- [Configuring Rate Shaping for a Scheduler Node or Queue](#)
- [Configuring Port Shaping](#)
- [Configuring a Basic Parameter Definition for QoS Administrators](#)

## shared-shaping-constituent

---

**Description** Sets the attributes of implicit and explicit shared-shaping constituents and specifies explicit shared-shaping constituents. Constituents default to priority with a priority value of 8. Priority constituents are ordered before weighted constituents. The **no** version deletes the attributes or explicit constituent.

**Syntax** `shared-shaping-constituent [ priority [ priorityValue ] | weight [ weightValue ] ]`  
`no shared-shaping-constituent`

- *priorityValue*—Value, in the range 1–8, that specifies the order in which the constituent can claim bandwidth from among all priority constituents; a lower value correlates to a higher claim; 8 is the default value
- *weightValue*—Value, in the range 1–31, that specifies the order in which the constituent can claim bandwidth from among all weighted constituents; a lower value correlates to a higher claim; 8 is the default value

**Mode** Scheduler Profile Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.

### Related Topics

- Configuring Implicit Constituents for Simple or Compound Shared Shaping
- Configuring Explicit Constituents for Simple or Compound Shared Shaping

## shared-shaping-rate

---

**Description** Sets the shared-shaping rate and burst size for the logical interface. This command must appear in the scheduler profile for either the best-effort queue or the best-effort scheduler node. The **no** version deletes the shared-shaping rate.

**Syntax** `shared-shaping-rate sharedShapingRate [ operator operandValue ]* [ bps | kbps ]`  
`[ burst burstSize [ milliseconds | bytes ] ] { simple | compound | auto }`  
`[ explicit-constituents ]`

`shared-shaping-rate operandValue [ operator operandValue ]* [ bps | kbps ]`  
`[ burst burstSize [ milliseconds | bytes ] ] { simple | compound | auto }`  
`[ explicit-constituents ]`

`no shared-shaping-rate`

- *sharedShapingRate*—Constant shared-shaping rate in bits per second; in the range 1000–10000000000 (1 Kbps–1000 Kbps)
- *operator*—Mathematical function
- *operandValue*—Input for the operator; can be a QoS parameter definition name or an integer
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line

- **bps**—Specifies shared-shaping rate in bits per second
- **kbps**—Specifies shared-shaping rate in kilobits per second
- **burstSize**—Number, in the range 0–522240 (0–510 KB); 0 enables the router to select an applicable default value
- **milliseconds**—Specifies burst size in milliseconds
- **bytes**—Specifies burst size in bytes
- **simple**—Specifies the simple form of shared shaping, which does not manage voice and video traffic, but shapes data queue rates to the value of the shared rate minus the combined voice and video traffic rate
- **auto**—Specifies that the router automatically selects the type of shared shaping depending on the module; compound is selected only for line modules that support it, and simple is selected for all other line modules; this is the default mode
- **compound**—Specifies the compound form of shared shaping, which actively shapes voice and video traffic so that the shared rate cannot be exceeded, and shapes data queue rates to the value of the shared rate minus the combined voice and video traffic rate; requires special hardware
- **explicit-constituents**—Overrides automatic selection of compound shared-shaping constituents and enables you to explicitly specify constituents and bandwidth allocation; generates an error message and has no effect when applied to modules that do not support compound shared shaping

**Mode** Scheduler Profile Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
*operator* and *operandValue* variables added in JUNOS Release 7.1.0.  
**milliseconds** and **bytes** keywords added in JUNOS Release 7.1.0.  
**bps** and **kbps** keywords added in JUNOS Release 8.0.0.

#### Related Topics

- Configuring Simple Shared Shaping
- Configuring Compound Shared Shaping
- Configuring Implicit Constituents for Simple or Compound Shared Shaping
- Configuring Explicit Constituents for Simple or Compound Shared Shaping
- Configuring a Basic Parameter Definition for QoS Administrators

## show aaa accounting

---

**Description** Displays AAA accounting configuration information, including the destinations where broadcast and duplicate accounting records are sent.

**Syntax** show aaa accounting [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa accounting default

---

**Description** Displays the AAA accounting method used for the particular type of subscriber.

**Syntax** show aaa accounting { *subscriberType* } default [ *filter* ]

- *subscriberType*—Specifies the type of subscriber:
  - atm1483—ATM 1483 subscribers
  - ip—IP subscriber management interfaces
  - ipsec—IPSec subscribers
  - ppp—PPP subscribers
  - radius-relay—RADIUS relay subscriber
  - tunnel—Tunnel subscribers
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa accounting interval

---

**Description** Displays information about the user and service accounting interval.

**Syntax** show aaa accounting interval [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa accounting vr-group

---

**Description** Displays the name of a particular virtual router group or the names of all virtual router groups configured on the router. Virtual router groups contain a list of virtual routers to which AAA broadcast accounting information can be sent.

**Syntax** show aaa accounting vr-group [ *vrGroupName* ] [ *filter* ]

- *vrGroupName*—Name of a specific virtual router group; a string of up to 32 characters; if omitted, names of all virtual router groups are displayed
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa authentication default

---

**Description** Displays the AAA authentication method list used for the particular type of subscriber.

**Syntax** show aaa authentication { *subscriberType* } default [ *filter* ]

- *subscriberType*—Specifies the type of subscriber:
  - atm1483—ATM 1483 subscribers
  - ip—IP subscriber management interfaces
  - ipsec—IPSec subscribers
  - ppp—PPP subscribers
  - radius-relay—RADIUS relay subscriber
  - tunnel—Tunnel subscribers
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa delimiters

---

**Description** Displays the domain name and realm name delimiters, parse order, and parse direction configured on the router.

**Syntax** show aaa delimiters [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa domain-map

---

**Description** Displays the mapping between user domains and virtual routers. The display includes a tunnel group if one is assigned to the domain map.

**Syntax** show aaa domain-map [ *filter* ]

- *filter*—See *Filtering show Commands in About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa duplicate-address-check

---

**Description** Configures AAA to query the routing table for duplicate address assignment before granting access.

**Syntax** show aaa duplicate-address-check [ *filter* ]

- *filter*—See *Filtering show Commands in About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa intf-desc-format

---

**Description** Displays whether the router includes or excludes the subinterface number and adapter in the interface description that the router passes to RADIUS for inclusion in the NAS-Port-Id attribute

**Syntax** show aaa intf-desc-format

**Description** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa model

---

**Description** Displays AAA model.

**Syntax** show aaa model [ *filter* ]

- *filter*—See *Filtering show Commands in About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa name-servers

---

**Description** Displays the IP addresses of the primary and secondary DNS and WINS name servers.

**Syntax** show aaa name-servers [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa profile

---

**Description** Displays AAA profile names and the actions associated with each specified AAA profile name.

**Syntax** show aaa profile [ *brief* | name *profileName* ] [ *filter* ]

- *brief*—Displays the status and number of configured VCs for all ATM interfaces configured in the router
- *profileName*—Name of the profile you want to display
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa qos downstream-rate

---

**Description** Displays whether the QoS downstream rate application is enabled to use downstream rates obtained from the Actual-Data-Rate-Downstream [26-30] DSL Forum VSA.

**Syntax** show aaa qos downstream-rate

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 8.1.0.

**Related Topics**

- Monitoring the AAA Downstream Rate for QoS



## show aaa route-download

---

**Description** Displays AAA route download statistics.

**Syntax** show aaa route-download [ statistics [ delta ] ] [ filter ]

- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 8.1.0.

## show aaa route-download routes

---

**Description** Displays information about AAA downloaded routes.

**Syntax** show aaa route-download routes [ vrfName ] [ detail ] [ filter ]

- vrfName—Name of a virtual routing and forwarding instance to display
- detail—Displays detailed information about downloaded routes
- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 8.1.0.

## show aaa route-download routes global

---

**Description** Displays information about AAA downloaded routes for all virtual routers and VRFs.

**Syntax** show aaa route-download routes global [ start startString ] [ detail ] [ filter ]

- startString—String that specifies the first router context to display in the output; a maximum of 32 alphanumeric characters
- detail—Displays detailed information about the downloaded routes
- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 8.1.0.

## show aaa service accounting interval

---

**Description** Displays the default accounting interval used by the Service Manager application for RADIUS-initiated services associated with users attached to this virtual router.

**Syntax** show aaa service accounting interval [ filter ]

- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 9.0.0.

## show aaa statistics

---

**Description** Displays the authentication and authorization statistics.

**Syntax** show aaa statistics [ delta ] [ filter ]

- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa subscriber per-port-limit

---

**Description** Displays the number of active subscribers on each interface.

**Syntax** show aaa subscriber per-port-limit [ filter ]

- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa subscriber per-vr-limit

---

**Description** Displays the number of active subscribers on each virtual router.

**Syntax** show aaa subscriber per-vr-limit [ filter ]

- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa timeout

---

**Description** Displays information about the idle and session timeouts.

**Syntax** show aaa timeout [ filter ]

- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa tunnel-group

---

**Description** Displays currently configured tunnel groups.

**Syntax** show aaa tunnel-group [ *tunnelGroupName* ] [ *filter* ]

- *tunnelGroupName*—Name of the tunnel group
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa tunnel-parameters

---

**Description** Displays default tunnel parameters that are configured for tunnel definitions.

**Syntax** show aaa tunnel-parameters [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show aaa user accounting interval

---

**Description** Displays the default accounting interval for users attached to this virtual router.

**Syntax** show aaa user accounting interval [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced in JUNOS Release 9.0.0.

## show access-list

---

**Description** Displays access list information about the access list specified.

**Syntax** show [ ip ] access-list [ *accessListName* ] [ detail ] [ *filter* ]

- *accessListName*—Name of the access list
- detail—Displays detailed information about the access list
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show adjustment-factor

---

|                            |                                                                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays the configured QoS adjustment factor that is applied to the ANCP-reported downstream and upstream data rate for all DSL line types or for the specified DSL line types.                                                                                                                         |
| <b>Syntax</b>              | <pre>show adjustment-factor [ adsl1   adsl2   adsl2+   vdsl   vdsl2   sds ]</pre> <ul style="list-style-type: none"><li>■ <i>dslType</i>—Type of DSL line for which the QoS adjustment rate is displayed: <b>adsl1</b>, <b>adsl2</b>, <b>adsl2 +</b>, <b>vdsl</b>, <b>vdsl2</b>, or <b>sds</b></li></ul> |
| <b>Mode</b>                | L2C Configuration                                                                                                                                                                                                                                                                                        |
| <b>Release Information</b> | Command introduced in JUNOS Release 9.1.0.                                                                                                                                                                                                                                                               |

## show aps

---

|                            |                                                                                                                                                                                                                    |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays information about APS/MSP interfaces or groups from APS-capable controllers in the system.                                                                                                                |
| <b>Syntax</b>              | <pre>show aps [ all [ group [ groupName ] ] ]</pre> <ul style="list-style-type: none"><li>■ <i>all</i>—Displays information from all APS/MSP groups</li><li>■ <i>groupName</i>—Name of the APS/MSP group</li></ul> |
| <b>Mode</b>                | Privileged Exec                                                                                                                                                                                                    |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.<br><b>all</b> keyword added in JUNOS Release 7.2.0.                                                                                                                 |

## show arp

---

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays information about the Address Resolution Protocol cache.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Syntax</b>              | <pre>show [ ip ] arp [ vrfName ] [ ipAddress ] [ interfaceType interfaceSpecifier ] [ all ] [ filter ]</pre> <ul style="list-style-type: none"><li>■ <i>vrfName</i>—Name of the VRF</li><li>■ <i>ipAddress</i>—IP address of the ARP entry</li><li>■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i></li><li>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i></li><li>■ <i>all</i>—Displays all ARP entries</li><li>■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i></li></ul> |
| <b>Mode</b>                | Privileged Exec, User Exec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## show atm aal5 interface

---

|                            |                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays configuration information about an ATM AAL5 interface.                                                                                                                                                                                                                                                                                                                               |
| <b>Syntax</b>              | <pre>show atm aal5 interface atm <i>interfaceSpecifier</i> [ <i>filter</i> ]</pre> <ul style="list-style-type: none"> <li>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i></li> <li>■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i></li> </ul> |
| <b>Mode</b>                | Privileged Exec, User Exec                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                |

## show atm atm1483

---

|                            |                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays whether or not the router is set up to export ATM 1483 subinterface descriptions to line modules. |
| <b>Syntax</b>              | <pre>show atm atm1483</pre>                                                                                |
| <b>Mode</b>                | Privileged Exec, User Exec                                                                                 |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                             |

## show atm bulk-config

---

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>         | Displays information, including base profile assignments and overriding profile assignments, for the bulk-configured VC ranges on an ATM AAL5 interface. You can display information for all VC ranges on the router, for all VC ranges on a particular ATM AAL5 interface, or for the VC range associated with a particular bulk configuration name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Syntax</b>              | <pre>show atm bulk-config [ atm <i>interfaceSpecifier</i> ] [name <i>bulkConfigName</i> ] [ <i>override</i> ] [ <i>filter</i> ]</pre> <ul style="list-style-type: none"> <li>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i></li> <li>■ <i>bulkConfigName</i>—Name associated with a VC range on the ATM AAL5 interface, as specified in the <b>atm bulk-config</b> command</li> <li>■ <i>override</i>—Displays information only about each overriding profile assignment configured for a specific ATM PVC within a bulk-configured VC subrange; when you use the <b>override</b> keyword, information about base profile assignments is not displayed</li> <li>■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i></li> </ul> |
| <b>Mode</b>                | Privileged Exec, User Exec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Release Information</b> | Command introduced before JUNOS Release 7.1.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## show atm interface

---

**Description** Displays configuration information about an ATM interface or a brief description of all ATM (major) interfaces configured in the router.

**Syntax** show atm interface {atm *interfaceSpecifier* | brief } [ delta ] [ *filter* ]

- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- brief—Displays the status and number of configured VCs for all ATM interfaces configured in the router
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

### Related Topics

- Monitoring the QoS Configuration of ATM Interfaces
- Monitoring the Policy Configuration of ATM Subinterfaces

## show atm map

---

**Description** Displays the list of all configured ATM static maps to remote hosts on an ATM network.

**Syntax** show atm map [ *mapName* ] [ brief ] [ *filter* ]

- *mapName*—Name of the map list
- brief—Displays information in a condensed format
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show atm mcpt-timers

---

**Description** Displays the current systemwide values configured on the router for the three ATM Martini cell packing timers.

**Syntax** show atm mcpt-timers [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

**Related Topics**

- Configuring an MPLS Pseudowire with VCC Cell Relay Encapsulation
- Monitoring ATM Martini Cell Packing Timers for Layer 2 Services over MPLS

## show atm oam

---

**Description** Displays F4 OAM statistics.

**Syntax** show atm oam *interfaceSpecifier* [ *vpi* ] [ segment | end-to-end ] [ *filter* ]

- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *vpi*—Virtual path identifier
- segment—Displays information about segment F4 OAM circuits
- end-to-end—Displays information about end-to-end F4 OAM circuits
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show atm ping

---

**Description** Displays a summary of the results (number of ping cells sent, number of ping cells received, success rate) of the ping operation. These results are overwritten when a new ATM ping is invoked for the circuit. If you do not specify any of the options, the command shows ping entries for the entire router.

**Syntax** show atm ping [atm *interfaceSpecifier* [ *vpi vci* ] ] [ *filter* ]

- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *vpi*—Virtual path identifier
- *vci*—Virtual circuit identifier
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.



## show atm subinterface

---

**Description** Displays the current state of all ATM subinterfaces that you specify.

**Syntax** show atm subinterface  
 [ summary | atm *interfaceSpecifier* | summary atm *interfaceSpecifier* |  
 status *operatingStatus* ] [ *filter* ]

- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- summary—Specifies that summary information is displayed
- status—Displays information only for the ATM subinterfaces with the specified operating status
- *operatingStatus*—One of the following operating states:
  - dormant
  - dormantLockout
  - down
  - lowerLayerDown
  - notPresent
  - up
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

### Related Topics

- Configuring an MPLS Pseudowire with VCC Cell Relay Encapsulation
- Monitoring ATM Subinterfaces for Layer 2 Services over MPLS

## show atm vc

---

- Description** Displays a summary of all configured ATM virtual circuits (VCs) and reserved VC ranges.
- Syntax** `show atm vc [ atm interfaceSpecifier ] { [ vpi vpi ] [ category categoryType ] [ status statusType ] | reserved } [ filter ]`
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
  - *vpi*—Virtual path identifier
  - *categoryType*—One of the following service categories for which VCs are displayed:
    - cbr
    - nrt-vbr
    - rt-vbr
    - ubr
    - ubr-pc
  - *statusType*—Status of VC to be displayed, up or down
  - reserved—Displays only a summary of all reserved VC ranges on the router, including those reserved for use by dynamic ATM 1483 subinterfaces and by MPLS
  - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

## show atm vc atm

---

**Description** Displays OAM statistics on a VC. You can specify the circuit to display by entering the VCD, or by using the **vpi-vci** keyword and specifying the VPI and VCI. You can also specify the circuit to display by entering the description configured for the ATM 1483 subinterface on which the VC resides.

**Syntax** `show atm vc { description | atm interfaceSpecifier { vcd | vpi-vci vpi vci } } [ delta ] [ filter ]`

- *description*—Text string or alias assigned to the ATM 1483 subinterface (with the **atm atm1483 description** command) on which the VC resides; up to 255 characters
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *vcd*—VCD identifying the VC
- *vpi*—Virtual path identifier
- *vci*—Virtual circuit identifier
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show atm vc-class

---

**Description** Displays the names of all VC classes configured on the router, or, when issued with a VC class name, displays detailed information about the attributes configured in the specified VC class.

**Syntax** `show atm vc-class [ vcClassName [ include-defaults ] ] [ filter ]`

- *vcClassName*—Name of the VC class configured with the **vc-class atm** command
- *include-defaults*—Includes commands that set default values for various parameters
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced in JUNOS Release 7.3.0.

## show atm vp

---

- Description** Displays detailed statistics for a specific ATM virtual path (VP) configured on the router.
- Syntax** `show atm vp atm interfaceSpecifier vpi [ delta ] [ filter ]`
- *interfaceSpecifier*—ATM interface specifier; see *Interface Types and Specifiers* in *About This Guide*
  - *vpi*—Virtual path identifier
  - *delta*—Displays baselined statistics
  - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced in JUNOS Release 7.1.0.

## show atm vp-description

---

- Description** Displays descriptions configured for virtual paths (VPs) on an ATM interface. You can display all VP descriptions configured on the router, all VP descriptions configured for a particular interface, or the VP description configured for a particular VPI.
- Syntax** `show atm vp-description [ interfaceSpecifier [ vpi ] ] [ filter ]`
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
  - *vpi*—Virtual path identifier number, in the range 0–255
  - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

## show atm vp-tunnel

---

- Description** Displays a summary of all configured ATM virtual path tunnels.
- Syntax** `show atm vp-tunnel [ interfaceSpecifier ] [ filter ]`
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
  - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

## show bandwidth oversubscription

---

**Description** Displays the bandwidth oversubscription status.

**Syntax** show bandwidth oversubscription [ *filter* ]

- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show bfd session

---

**Description** Displays Bidirectional Forwarding Detection (BFD) protocol session information.

**Syntax** show bfd session [ *address* [ *ipAddress* | *ipv6Address* ] ] [ *detail* ] [ *filter* ]

- *ipAddress*—IPv4 address of the session
- *ipv6Address*—IPv6 address of the session
- *detail*—Displays detailed information about the BFD session
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

## show bgp ipv6

---

**Description** Displays filtered information about a specified network, or all networks, in the IPv6 BGP routing table. Only those fields that you specify are displayed, except that the prefix field is always displayed. Default fields can be set with the **default-fields route** command.

**Syntax** To display information about networks in address families other than the route-target address family:

```
show bgp ipv6 [unicast | multicast | vpnv6 all | vpnv6 vrf vrfName]
 ipv6Prefix [longer-prefixes] [fields { fieldOptions }] [filter]
```

To display information about networks in only the route-target address family:

```
show bgp ipv6 route-target signaling { rtfPrefix [longer-prefixes] | rtfAddress }
 [fields { fieldOptions }] [filter]
```

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- *ipv6Prefix*—Prefix that defines the IPv6 network that you want to filter
- longer-prefixes—Displays all routes with a prefix that is equal to or more specific than the specified prefix
- route-target signaling—Specifies the route-target address family
- *rtfPrefix*—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
  - *asNumber*—AS number for origin of route target information, in the range 1–4294967295
  - *extendedCommunity*—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
    - *number1*—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
    - *number2*—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number
  - *prefixLength*—Number that specifies the length of the route prefix, in the range 32–96
- *rtfAddress*—*rtfPrefix* with a prefix length of 96; representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity* (for example, 320:320:524 or 320:50.2.3.4:524)
- fields—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format *all* | [*afi* | *aggregator* | *as-path* | *atomic-aggregate* | *best* | *clusters* | *communities* | *extended-communities* | *imported* | *intro* | *in-label* | *loc-pref* | *med* | *next-hop* | *next-hop-cost* | *origin* | *originator-id* | *out-label* | *peer* | *peer-type* | *rd* | *safi* | *stale* | *unknown-types* | *weight* ]\*
  - *all*—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - *afi*—Address family identifier
  - *aggregator*—AS number and IP address of aggregator
  - *as-path*—AS path through which this route has been advertised
  - *atomic-aggregate*—Whether the atomic aggregate attribute is present

- **best**—Whether this is the best route for the prefix
- **clusters**—List of cluster IDs through which the route has been advertised
- **communities**—Community number associated with the route
- **extended-communities**—Extended community
- **imported**—Whether the route was imported
- **intro**—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- **in-label**—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- **loc-pref**—Local preference for the route
- **med**—Multiexit discriminator for the route
- **next-hop**—IP address of the next router that is used when forwarding a packet to the destination network
- **next-hop-cost**—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- **origin**—Origin of the route
- **originator-id**—Router ID of the router in the local AS that originated the route
- **out-label**—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- **peer**—IP address of BGP peer from which route was learned
- **peer-type**—Type of BGP peer: internal, external, or confederation
- **rd**—Route distinguisher
- **safi**—Subsequent address family identifier
- **stale**—Route that has gone stale due to peer restart
- **unknown-types**—Attribute codes for unknown path attributes
- **weight**—Weight of the route
- **\***—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- **filter**—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords and *rtMemNlri* variable added in JUNOS Release 8.2.0.  
*rtMemNlri* variable replaced by two variables, *rtfAddress* and *rtfPrefix*, in JUNOS Release 9.1.0.

## show bgp ipv6 advertised-routes

**Description** Displays IPv6 BGP routes advertised to the specified BGP peer or peer group.

**Syntax** To display routes advertised to a neighbor or peer group in all address families or a particular address family other than the route-target address family:  
 show bgp ipv6 [ unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* ]  
 { neighbors { *ipAddress* | *ipv6Address* } | peer-group *peerGroupName* }

```
advertised-routes [ipv6Prefix [longer-prefixes]]
[fields { fieldOptions }] [delta] [filter]
```

To display routes advertised to a neighbor or peer group in only the route-target address family:

```
show bgp ipv6 route-target signaling
{ neighbors { ipAddress | ipv6Address } | peer-group peerGroupName }
advertised-routes [fields { fieldOptions }] [delta] [filter]
```

To display routes advertised to the specified peer group for all VPN address families or for a particular VPN address family; optionally after the application of route-target filters advertised by the specified member of the peer group:

```
show bgp ipv6 [vpn6 all | vpn6 vrf vrfName | l2vpn [all] | route-target signaling]
peer-group peerGroupName advertised-routes
[route-target-filter neighbor { ipRtfnbrAddress | ipv6RtfnbrAddress }]
[fields { fieldOptions }] [delta] [filter]
```

- *unicast*—Specifies the IPv6 unicast address family and routing table; the default option
- *multicast*—Specifies the IPv6 multicast address family and routing table
- *vpn6 all*—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- *vpn6 vrf vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- *ipAddress*—IP address of the IPv6 BGP neighbor
- *ipv6Address*—IPv6 address of the IPv6 BGP neighbor
- *peerGroupName*—Name of the IPv6 BGP peer group
- *ipv6Prefix*—Prefix that defines the IPv6 network that you want to filter
- *longer-prefixes*—Displays all routes with a prefix that is equal to or more specific than the specified prefix
- *route-target signaling*—Specifies the route-target address family
- *l2vpn*—Displays information for only the L2VPN address family
- *all*—Optional keyword; has no effect
- *route-target-filter neighbor*—Displays routes actually advertised to the specified peer group member (*neighbor*); which routes are advertised is determined by the application of the route-target filter received from that neighbor to routes in the peer group's Adj-RIBs-Out table
- *ipRtfnbrAddress*—IP address of a peer group member that has advertised route-target membership filtering information



- *ipv6Rt/NbrAddress*—IPv6 address of a peer group member that has advertised route-target membership filtering information
- *fields*—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format  
all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters |  
communities | extended-communities | imported | intro | in-label | loc-pref |  
med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |  
peer-type | rd | safi | stale | unknown-types | weight ]\*

For peers, all described options are available. For peer groups, all options are available except the following:

best | imported | intro | next-hop-cost | peer | peer-type | stale | weight

- *all*—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- *afi*—Address family identifier
- *aggregator*—AS number and IP address of aggregator
- *as-path*—AS path through which this route has been advertised
- *atomic-aggregate*—Whether the atomic aggregate attribute is present
- *best*—Whether this is the best route for the prefix
- *clusters*—List of cluster IDs through which the route has been advertised
- *communities*—Community number associated with the route
- *extended-communities*—Extended community
- *imported*—Whether the route was imported
- *intro*—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- *in-label*—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- *loc-pref*—Local preference for the route
- *med*—Multiexit discriminator for the route
- *next-hop*—IP address of the next router that is used when forwarding a packet to the destination network
- *next-hop-cost*—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- *origin*—Origin of the route
- *originator-id*—Router ID of the router in the local AS that originated the route
- *out-label*—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers

- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
*ipv6Address* variable added in JUNOS Release 8.0.0.  
**route-target signaling** and **route-target-filter neighbor** keywords and *ipRtFNbrAddress* and *ipv6RtFNbrAddress* variables added in JUNOS Release 8.2.0.

## show bgp ipv6 aggregate-address

---

**Description** Displays information about IPv6 BGP aggregate addresses.

**Syntax** show bgp ipv6 [ unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* ]  
 aggregate-address [ *ipv6Prefix* ] [ *filter* ]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- *ipv6Prefix*—Aggregate IPv6 prefix
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.

**show bgp ipv6 community**

**Description** Displays routes that belong to the specified BGP community.

**Syntax** `show bgp ipv6`  
`[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ] community`  
`{ communityNumber | local-as | no-advertise | no-export }`  
`[ communityNumber | local-as | no-advertise | no-export ]*`  
`[ exact-match ] [ fields { fieldOptions } ] [ filter ]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `communityNumber`—Filters routes according to this community number, specified either as a number in the range 1–4294967295 or in *AA:NN* format (autonomous system number:community number); displays only routes that are members of the specified community
- `local-as`—Displays only routes belonging to the local AS community
- `no-advertise`—Displays only routes belonging to the no-advertise community
- `no-export`—Displays only routes belonging to the no-export community
- `*`—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- `exact-match`—Displays only routes that have exactly the specified communities
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format  
`all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters |`  
`communities | extended-communities | imported | intro | in-label | loc-pref |`  
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`  
`peer-type | rd | safi | stale | unknown-types | weight ]*`
  - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - `afi`—Address family identifier
  - `aggregator`—AS number and IP address of aggregator
  - `as-path`—AS path through which this route has been advertised
  - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.

**show bgp ipv6 community-list**

**Description** Displays routes that belong to the BGP community specified by the community list.

**Syntax** `show bgp ipv6`  
`[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ]`  
`community-list communityListName [ exact-match ] [ fields { fieldOptions } ] [ filter ]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `communityListName`—Filters routes according to community list; displays only routes that are members of a community on the specified list
- `exact-match`—Displays only routes that have exactly the specified communities
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format  
`all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters |`  
`communities | extended-communities | imported | intro | in-label | loc-pref |`  
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`  
`peer-type | rd | safi | stale | unknown-types | weight ]*`
  - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - `afi`—Address family identifier
  - `aggregator`—AS number and IP address of aggregator
  - `as-path`—AS path through which this route has been advertised
  - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.

## show bgp ipv6 dampened-paths

---

**Description** Displays information about dampened IPv6 BGP routes.

**Syntax** `show bgp ipv6`  
`[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ]`  
`dampened-paths [ fields { fieldOptions } ] [ filter ]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format  
`all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters |`  
`communities | extended-communities | imported | intro | in-label | loc-pref |`  
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`  
`peer-type | rd | safi | stale | unknown-types | weight ]*`
  - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - `afi`—Address family identifier
  - `aggregator`—AS number and IP address of aggregator
  - `as-path`—AS path through which this route has been advertised
  - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.



**show bgp ipv6 filter-list**

**Description** Displays all routes whose AS path matches the specified AS path access list.

**Syntax** `show bgp ipv6`  
`[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ]`  
`filter-list asPathAccessListName [ fields { fieldOptions } ] [ filter ]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `asPathAccessListName`—Name of AS path access list to filter routes; displays only routes that have AS paths matching the specified list
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format  
`all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters |`  
`communities | extended-communities | imported | intro | in-label | loc-pref |`  
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`  
`peer-type | rd | safi | stale | unknown-types | weight ]*`
  - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - `afi`—Address family identifier
  - `aggregator`—AS number and IP address of aggregator
  - `as-path`—AS path through which this route has been advertised
  - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.

## show bgp ipv6 flap-statistics

**Description** Displays IPv6 BGP flap statistics.

- Syntax** To display IPv6 BGP flap statistics for any case other than for the route-target address family:
- ```
show bgp ipv6 [ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName ]
flap-statistics [ ipv6Prefix ] [ filter ]
```
- To display IPv6 BGP flap statistics for the route-target address family:
- ```
show bgp ipv6 route-target signaling flap-statistics [rtfPrefix | rtfAddress] [filter]
```
- **unicast**—Specifies the IPv6 unicast address family and routing table; the default option
  - **multicast**—Specifies the IPv6 multicast address family and routing table
  - **vpnv6 all**—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
  - **vpnv6 vrf vrfName**—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
  - **ipv6Prefix**—IPv6 prefix for which you want information displayed. If no prefix is specified, the fields are displayed for all networks.
  - **route-target signaling**—Specifies the route-target address family
  - **rtfPrefix**—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
    - **asNumber**—AS number for origin of route target information, in the range 1–4294967295
    - **extendedCommunity**—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
      - **number1**—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
      - **number2**—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number
    - **prefixLength**—Number that specifies the length of the route prefix, in the range 32–96
  - **rtfAddress**—*rtfPrefix* with a prefix length of 96; representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity* (for example, 320:320:524 or 320:50.2.3.4:524)
  - **filter**—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords and *rtMemNlri* variable added in JUNOS Release 8.2.0.  
*rtMemNlri* variable replaced by two variables, *rtfAddress* and *rtfPrefix*, in JUNOS Release 9.1.0.

## show bgp ipv6 inconsistent-as

---

**Description** Displays information only about routes with inconsistent AS paths.

**Syntax** `show bgp ipv6`  
`[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ]`  
`inconsistent-as [ fields { fieldOptions } ] [ filter ]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format  
`all | [ afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight ]*`
  - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
  - `afi`—Address family identifier
  - `aggregator`—AS number and IP address of aggregator
  - `as-path`—AS path through which this route has been advertised
  - `atomic-aggregate`—Whether the atomic aggregate attribute is present
  - `best`—Whether this is the best route for the prefix
  - `clusters`—List of cluster IDs through which the route has been advertised
  - `communities`—Community number associated with the route
  - `extended-communities`—Extended community
  - `imported`—Whether the route was imported
  - `intro`—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
  - `in-label`—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
  - `loc-pref`—Local preference for the route

- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- \*—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.

## show bgp ipv6 neighbors

---

**Description** Displays information about BGP neighbors.

**Syntax** show bgp ipv6  
[ unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* | route-target signaling ]  
neighbors [ *ipAddress* | *ipv6Address* ] [ delta ] [ *filter* ]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- route-target signaling—Specifies the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

**Mode** Privileged Exec, User Exec

**Release Information** Command introduced before JUNOS Release 7.1.0.  
*ipv6Address* variable added in JUNOS Release 8.0.0.  
**route-target signaling** keywords added in JUNOS Release 8.2.0.

## show bgp ipv6 neighbors dampened-routes

- Description** Displays information about IPv6 BGP routes with a dampening history for the specified BGP neighbor.
- Syntax**
- ```
show bgp ipv6
[ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling ]
neighbors { ipAddress | ipv6Address } dampened-routes [ fields { fieldOptions } ]
[ delta ] [ filter ]
```
- *unicast*—Specifies the IPv6 unicast address family and routing table; the default option
 - *multicast*—Specifies the IPv6 multicast address family and routing table
 - *vpnv6 all*—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
 - *vpnv6 vrf *vrfName**—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
 - *route-target signaling*—Specifies the route-target address family
 - *ipAddress*—IP address of a neighbor whose routes the router has learned
 - *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
 - *fields*—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
 - *fieldOptions*—Fields to be displayed, in the format
all | [*afi* | *aggregator* | *as-path* | *atomic-aggregate* | *best* | *clusters* | *communities* | *extended-communities* | *imported* | *intro* | *in-label* | *loc-pref* | *med* | *next-hop* | *next-hop-cost* | *origin* | *originator-id* | *out-label* | *peer* | *peer-type* | *rd* | *safi* | *stale* | *unknown-types* | *weight*]*
 - *all*—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - *afi*—Address family identifier
 - *aggregator*—AS number and IP address of aggregator
 - *as-path*—AS path through which this route has been advertised
 - *atomic-aggregate*—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 neighbors paths

Description Displays IPv6 BGP path information for the specified BGP neighbor.

Syntax show bgp ipv6
 [unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* | route-target signaling]
 neighbors { *ipAddress* | *ipv6Address* } paths [*pathExpression*] [*filter*]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- route-target signaling—Specifies the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- *pathExpression*—See the **show ip bgp regexp** command for descriptions
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 neighbors received-routes

- Description** Displays IPv6 BGP routes originating from the specified BGP neighbor before inbound policy is applied.
- Syntax** `show bgp ipv6`
`[unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling]`
`neighbors { ipAddress | ipv6Address } received-routes [fields { fieldOptions }]`
`[delta] [filter]`
- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
 - `multicast`—Specifies the IPv6 multicast address family and routing table
 - `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
 - `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
 - `route-target signaling`—Specifies the route-target address family
 - *ipAddress*—IP address of a neighbor whose routes the router has learned
 - *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
 - `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
 - *fieldOptions*—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present
 - `best`—Whether this is the best route for the prefix
 - `clusters`—List of cluster IDs through which the route has been advertised
 - `communities`—Community number associated with the route
 - `extended-communities`—Extended community
 - `imported`—Whether the route was imported

- **intro**—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- **in-label**—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- **loc-pref**—Local preference for the route
- **med**—Multiexit discriminator for the route
- **next-hop**—IP address of the next router that is used when forwarding a packet to the destination network
- **next-hop-cost**—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- **origin**—Origin of the route
- **originator-id**—Router ID of the router in the local AS that originated the route
- **out-label**—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- **peer**—IP address of BGP peer from which route was learned
- **peer-type**—Type of BGP peer: internal, external, or confederation
- **rd**—Route distinguisher
- **safi**—Subsequent address family identifier
- **stale**—Route that has gone stale due to peer restart
- **unknown-types**—Attribute codes for unknown path attributes
- **weight**—Weight of the route
- *****—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- **delta**—Displays baselined statistics
- **filter**—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 neighbors routes

Description Displays IPv6 BGP routes originating from the specified BGP neighbor after inbound policy is applied.

Syntax `show bgp ipv6`
`[unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling]`
`neighbors { ipAddress | ipv6Address } routes [fields { fieldOptions }] [delta] [filter]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present
 - `best`—Whether this is the best route for the prefix
 - `clusters`—List of cluster IDs through which the route has been advertised
 - `communities`—Community number associated with the route
 - `extended-communities`—Extended community
 - `imported`—Whether the route was imported
 - `intro`—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
 - `in-label`—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
 - `loc-pref`—Local preference for the route
 - `med`—Multiexit discriminator for the route

- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 network

Description Displays information about a potentially originated prefix that was configured with the **network** command.

Syntax To display information about a prefix configured for all address families or for a specific address family other than the route-target address family:

```
show bgp ipv6 [ unicast | multicast | vpnv6 all | vpnv6 vrf vrfName ]
network [ ipv6Prefix ] [ filter ]
```

To display information about about a prefix configured for the route-target address family:

```
show bgp ipv6 route-target signaling network [ rtfPrefix ] [ filter ]
```

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- *ipv6Prefix*—Prefix that defines the IPv6 network that you want to filter
- route-target signaling—Displays information for only the route-target address family
- *rtfPrefix*—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
 - *asNumber*—AS number for origin of route target information, in the range 1–4294967295
 - *extendedCommunity*—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
 - *number1*—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
 - *number2*—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number
 - *prefixLength*—Number that specifies the length of the route prefix, in the range 32–96
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords and *rtMemNlri* variable added in JUNOS Release 9.0.0.
rtMemNlri variable replaced by *rtfPrefix* variable in JUNOS Release 9.1.0.

show bgp ipv6 next-hops

Description Displays information about IPv6 BGP next hops.

Syntax show bgp ipv6
 [unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* | route-target signaling]
 next-hops [*ipv6Address*] [*filter*]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- route-target signaling—Specifies the route-target address family
- *ipv6Address*—Information only for this indirect next hop
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 paths

Description Displays information about IPv6 BGP AS paths.

Syntax show bgp ipv6
 [unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* | route-target signaling]
 paths [*pathExpression*] [*filter*]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- route-target signaling—Specifies the route-target address family
- *pathExpression*—See the **show ip bgp regexp** command for descriptions
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 peer-group

Description Displays information about BGP peer groups.

Syntax show bgp ipv6
[unicast | multicast | vpnv6 all | vpnv6 vrf *vrfName* | route-target signaling]
peer-group [*peerGroupName*] [*filter*]

- unicast—Specifies the IPv6 unicast address family and routing table; the default option
- multicast—Specifies the IPv6 multicast address family and routing table
- vpnv6 all—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- vpnv6 vrf *vrfName*—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- route-target signaling—Specifies the route-target address family
- *peerGroupName*—Name of the BGP peer group
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 quote-regexp

- Description** Displays information about IPv6 BGP routes whose AS path matches the specified regular expression. Regular expressions match numbers for which the specified path is a substring—for example, if you specify *20*, *200* matches because *20* is a substring of *200*. You can disallow substring matching by using the underscore (`_`) metacharacter to constrain matching to the specified pattern; for example, *_20_*. You can use output filtering on the display.
- Syntax** `show bgp ipv6`
`[unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling]`
`quote-regexp pathExpression [fields { fieldOptions }] [filter]`
- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
 - `multicast`—Specifies the IPv6 multicast address family and routing table
 - `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
 - `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
 - `route-target signaling`—Specifies the route-target address family
 - `quote-regexp`—Indicates that only a single element is matched
 - *pathExpression*—See the **show ip bgp regexp** command for descriptions
 - `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
 - *fieldOptions*—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters |`
`communities | extended-communities | imported | intro | in-label | loc-pref |`
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`
`peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 regexp

Description Displays information about IPv6 BGP routes whose AS path matches one or more specified regular expressions. Regular expressions match numbers for which the specified path is a substring—for example, if you specify *20*, *200* matches because *20* is a substring of *200*. You can disallow substring matching by using the underscore (`_`) metacharacter to constrain matching to the specified pattern; for example, *_20_*. You can use output filtering on the display.

Syntax `show bgp ipv6`
`[unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling]`
`regexp pathExpression [fields { fieldOptions }] [filter]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Specifies the route-target address family
- `regexp`—Indicates that multiple elements can be matched
- *pathExpression*—See the **show ip bgp regexp** command for descriptions
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters |`
`communities | extended-communities | imported | intro | in-label | loc-pref |`
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`
`peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show bgp ipv6 summary

Description Displays filtered information about the status of all BGP connections. Only those fields that you specify are displayed, except that the prefix field is always displayed. Default fields can be set with the **default-fields peer** command.

Syntax `show bgp ipv6`
`[unicast | multicast | vpnv6 all | vpnv6 vrf vrfName | route-target signaling]`
`summary [fields { fieldOptions }] [delta] [filter]`

- `unicast`—Specifies the IPv6 unicast address family and routing table; the default option
- `multicast`—Specifies the IPv6 multicast address family and routing table
- `vpnv6 all`—Specifies the VPN-IPv6 address family and all IPv6 VPN routing and forwarding instances
- `vpnv6 vrf vrfName`—Specifies the VPN-IPv6 address family and only the IPv6 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Displays information for only the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format
`all | [dynamic | intro | last-reset-reason | messages-received | messages-sent | more-in-queue | peer-type | prefixes-received | remote-as | rib-version | send-queue-length | state | times-up | up-down-time | updates-received | updates-sent]*`
 - `dynamic` —Nature of peer, dynamic or not
 - `intro`—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
 - `last-reset-reason`—Reason for most recent reset
 - `messages-received`—Total number of messages received from the peer
 - `messages-sent`—Total number of messages sent to the peer
 - `more-in-queue`—Status indicating whether any messages are waiting to be sent to this peer
 - `peer-type`—Type of BGP peer: internal, external, or confederation
 - `prefixes-received`—Number of unique prefixes received from the peer
 - `remote-as`—Remote AS number of the peer
 - `rib-version`—Last RIB version queued to be sent to this peer
 - `send-queue-length`—Number of messages queued to be sent to this peer
 - `state`—State of the BGP session

- times-up—Number of times the session has been established
- up-down-time—How long the session has been up or down
- updates-received—Number of update messages received from the peer
- updates-sent—Number of update messages sent to the peer
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show boot

Description Displays the configuration and router settings that are used at startup.

Syntax show boot [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bridge1483 interface

Description Displays configuration and status information for all bridged Ethernet interfaces currently configured on the router. Alternatively, you can use the **summary** keyword to display only brief summary information for all bridged Ethernet interfaces.

Syntax show bridge1483 interface [atm *interfaceSpecifier*] [*filter*]

To display summary information:
 show bridge1483 interface summary

- atm—Specifies ATM interfaces
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers in About This Guide*
- *filter*—See *Filtering show Commands in About This Guide*
- summary—Displays only the total number of bridged Ethernet interfaces currently configured on the router

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
atm keyword and *interfaceSpecifier* variable added in JUNOS Release 7.2.0.

show bridge

Description Displays configuration and statistics information for the specified bridge group or VPLS instance.

Syntax `show bridge { bridgeGroupName | vplsName } [all [delta]] [filter]`

- *bridgeGroupName*—Name of a bridge group specified with the **bridge** command
- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- *all*—Displays address table and statistics information for each network interface assigned to the bridge group or VPLS instance
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vplsName variable added in JUNOS Release 7.1.0.

Related Topics

- Monitoring VPLS Configuration and Statistics for a Specific VPLS Instance

show bridge groups

Description Displays configuration information for all bridge groups and VPLS instances currently configured on the router.

Syntax `show bridge groups [details] [filter]`

- *details*—Displays configuration settings for each bridge group or VPLS instance on the router; if you omit this keyword, the router displays only the names of each bridge group or VPLS instance
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring VPLS Configuration and Statistics for all VPLS Instances

show bridge interface

Description Displays configuration, statistics, and status information for a specified network interface that belongs to a bridge group or to a VPLS instance, or for all interfaces that belong to a bridge group or to a VPLS instance.

When you use the **show bridge interface** command to display information for all interfaces in a VPLS instance, the router displays information about the network interfaces that belong to the VPLS instance and about the VPLS virtual core interface, which represents all the MPLS tunnels from the router to the remote VPLS edge (VE) devices.

Syntax To display information about a specified network interface that belongs to a bridge group or to a VPLS instance:

show bridge interface *interfaceType interfaceSpecifier* [*delta*] [*filter*]

- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*
 - atm
 - fastEthernet
 - gigabitEthernet
 - tenGigabitEthernet
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

To display information about all interfaces that belong to a bridge group or to a VPLS instance, including the VPLS virtual core interface for a VPLS instance:

show bridge { *bridgeGroupName* | *vplsName* } **interface** [*brief* | *delta*] [*filter*]

- *bridgeGroupName*—Name of a bridge group specified with the **bridge** command
- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- *brief*—Displays the type, specifier, associated port number, and operational status for each interface
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vplsName variable added in JUNOS Release 7.1.0.

Related Topics

- Monitoring Configuration, Statistics, and Status for VPLS Network Interfaces

show bridge interface vpls

Description Displays configuration, statistics, and status information for a VPLS instance on the VPLS virtual core interface, which represents all the MPLS tunnels from the router to the remote VPLS edge (VE) devices.

Syntax `show bridge interface vpls vplsName [delta] [filter]`

- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- Monitoring Configuration, Statistics, and Status for VPLS Core Interfaces

show bridge port

Description Displays configuration, statistics, and status information for ports (interfaces) associated with a bridge group or VPLS instance.

Syntax `show bridge { bridgeGroupName | vplsName } port [portNumber] [brief | delta] [filter]`

- *bridgeGroupName*—Name of a bridge group specified with the **bridge** command
- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- *portNumber*—Port number for which you want to display information; if you omit the port number, the router displays information for all ports that belong to the bridge group or to the VPLS instance
- *brief*—Displays the port number, interface type, interface specifier, and operational status for each port that belongs to the bridge group or to the VPLS instance
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vplsName variable added in JUNOS Release 7.1.0.

Related Topics

- Monitoring Configuration, Statistics, and Status for VPLS Ports

show bridge table

Description Displays information about the entries in the MAC address table for the specified bridge group or VPLS instance. You can display information only for static entries, only for dynamic entries, or for both static and dynamic entries.

Syntax show bridge { *bridgeGroupName* | *vplsName* } table [static | dynamic] [*filter*]

- *bridgeGroupName*—Name of a bridge group specified with the **bridge** command
- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- static—Displays information for only static (nonlearned) entries in the MAC address table
- dynamic—Displays information for only dynamic (learned) entries in the MAC address table
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vplsName variable added in JUNOS Release 7.1.0.

Related Topics

- Monitoring MAC Address Entries for a Specific VPLS Instance

show bulkstats

Description Displays bulkstats statistical information.

Syntax show bulkstats [brief] [*filter*]

- brief—Displays a brief description for each collector type
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats collector description

Description Displays the collector's file description.

Syntax show bulkstats collector description [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats collector interval

Description Displays the time for which the router transfers data to the receivers.

Syntax show bulkstats collector interval [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats collector max-size

Description Displays the maximum size of the bulkstats file.

Syntax show bulkstats collector max-size [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats collector transfer-mode

Description Displays the way in which the router transfers data to the receivers.

Syntax show bulkstats collector transfer-mode [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats interface-type

Description Displays information about the collection of statistical data for the particular interface type (for example, ATM).

Syntax show bulkstats interface-type [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats receiver

Description Displays the configuration of the receiver's remote files.

Syntax show bulkstats receiver [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats schema

Description Displays data on the selected schema.

Syntax show bulkstats schema [*filter*]
■ *filter*—if-stack or if-stats; see *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats statistics

Description Displays information about statistics counters.

Syntax show bulkstats statistics [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats traps

Description Displays information about bulkstats traps.

Syntax show bulkstats traps [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show bulkstats virtual-routers

Description Displays information about bulkstats router groups.

Syntax show bulkstats virtual-routers

- virtual-routers—Name or unique index number that contains from one to the maximum number of routers supported in the system

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show cac

Description Displays global call admission control configuration.

Syntax show cac [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show cac interface

Description Displays all interfaces on which TE bandwidth accounting is configured, or information only for the specified interface.

Syntax show cac interface [*brief* | *interfaceType interfaceSpecifier*] [*filter*]

- *brief*—Displays summary information about the interface
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show classifier-list

Description Displays information about classifier control lists.

Syntax show classifier-list [*classifierName* [*classifierNumber*]] [*brief* | *detailed*] [*filter*]

- *classifierName*—Name of classifier control list
- *classifierNumber*—Number associated with a classifier control list entry
- *brief*—Displays information in a condensed format
- *detailed*—Displays detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Classifier Control Lists

show clns

Description Displays information about the CLNS network.

Syntax show clns [*es-neighbors* | *is-neighbors*] [*interfaceType interfaceSpecifier*] [*detail*] [*filter*]

- *es-neighbors*—Displays IS-IS related information for IS-IS end-system adjacencies. Neighbor entries are sorted according to the area in which they are located.
- *is-neighbors*—Displays IS-IS related information for IS-IS intermediate-system adjacencies. Neighbor entries are sorted according to the area in which they are located.
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *detail*—Displays area addresses and IP addresses; if not specified, a summary display is provided
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show clns interface

Description Lists the Connectionless Network Service information about each interface.

Syntax show clns interface [*interfaceType interfaceSpecifier*] [*brief*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *brief*—Displays summary information about the interface or all interfaces
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
brief keyword added in JUNOS Release 8.0.0.

show clns neighbors

Description Displays both ES and IS neighbors.

Syntax show clns neighbors [*interfaceType interfaceSpecifier*] [*detail*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *detail*—When specified, the area addresses advertised by the neighbor in the hello messages are displayed; otherwise, a summary display is provided
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show clns protocol

Description Lists the protocol-specific information for each IS-IS routing process in the router.

Syntax show clns protocol [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show cns traffic

Description	Displays IS-IS protocol statistics globally for the router or for only a specified interface.
Syntax	<pre>show cns traffic [<i>interfaceType interfaceSpecifier</i>] [<i>detail</i>] [<i>delta</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>detail</i>—Displays detailed statistics; statistics for hello packets, CSNPs, and PSNPs are displayed only when an interface is also specified■ <i>delta</i>—Displays baselined statistics■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show clock

Description	Displays the router's clock source.
Syntax	<pre>show clock [<i>detail</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>detail</i>—Provides expanded information about the clock settings, rather than a summary■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show color-mark-profile

Description	Displays color mark profile entries.
Syntax	<pre>show color-mark-profile <i>colorMarkProfileName</i> [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>colorMarkProfileName</i>—Name of the color mark profile■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.2.0.
Related Topics	<ul style="list-style-type: none">■ Monitoring Color-Mark Profiles

show columns

Description	Displays configuration information of bridged Ethernet over ATM, IP over ATM, PPP, or PPPoE static and dynamic interface columns. It is designed to categorize interface subscribers into PPP, PPPoE, bridged, or routed.
Syntax	show columns
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show configuration

Description	Displays the current (running) configuration of the router, a specified virtual router, a specified interface, or a specified category of router settings. You can create a configuration script from this output by saving it as a file with the .scr extension. This command was formerly documented as show config ; that abbreviation is still supported.
Syntax	<pre>show configuration [interface <i>interfaceType</i> <i>interfaceSpecifier</i>] [category <i>categoryName</i> [<i>categoryName</i>]*] [virtual-router <i>routerName</i>] [[exclude-category interface <i>interfaceType</i>]*] [include-defaults] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>categoryName</i>—Name of the category or subcategory of router settings; first <i>categoryName</i> variable in the syntax represents the category; repeated <i>categoryName</i> variables represent subcategories of the category ■ <i>routerName</i>—Name of the virtual router ■ exclude-category—Excludes information associated with a particular type of interface ■ *—Indicates that one or more parameters can be repeated multiple times in a list in the command line ■ include-defaults—Includes commands that set default values for various parameters ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show control-plane policer

Description	Displays control plane information for a specified protocol or for all protocols.
Syntax	<pre>show control-plane policer protocol <i>protocolValue</i></pre> <ul style="list-style-type: none"> ■ <i>protocolValue</i>—Name of the protocol
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 8.0.0.

Related Topics

- Monitoring Control Plane Policer Information

show controllers e3

Description Displays information about E3 controller interfaces.

Syntax show controllers e3 [brief | { *interfaceSpecifier* [brief | all | summary] | serial [*interfaceSpecifier*] }] [*filter*]

- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- brief—Abbreviated display of E3 controller information
- all—Detailed display of all available E3 controller information
- summary—Displays link status summary
- serial—Displays information about serial interfaces
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show controllers sonet

Description Displays the statistics or the configuration for the different layers of channelized SONET and SDH interfaces.

Syntax show controllers sonet { [brief] | *interfaceSpecifier* [:*controllerSpecifier*] { [configuration] | *layerType* [interval | total [delta]] | *controllerType* [interval] | all [total [delta]] } } [*filter*]

- brief—Displays a summary of information about all controllers
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *controllerSpecifier*—One of the following:
 - For a section or line, there is no *controllerSpecifier*
 - For a path, the number of the path
 - For a tributary, specified in the format *pathChannel* [*lpathPayload*] [*ltributaryGroup*] [*ltributaryNumber*]
 - For an E1 or a DS1 controller, specified in the format *pathChannel* [*lpathPayload*] [*ltributaryGroup*] [*ltributaryNumber*] [*lchannelGroup*]
 - For a DS3 controller, specified in the format *pathChannel* *ds3-channel-number* [*ds1-channel-number*] [*subchannelNumber*]
 - *pathChannel*—Number of the path

- ❑ *pathPayload*—Number of the payload within the path. In SONET mode, *pathPayload* is always 1. In SDH mode, *pathPayload* is the number of the TUG-3 group.
 - ❑ *tributaryGroup*—Number of the tributary group within the path. In SONET mode, *tributary group* is the number of the VT group. In SDH mode, tributary group is the number of the TUG-2 group.
 - ❑ *tributaryNumber*—Number of the tributary within the group. In SONET mode, *tributaryNumber* is the number of the VT. In SDH mode, *tributaryNumber* is the number of the TUG-1 group or tributary unit.
 - ❑ *channelGroup*—Number of the channel group
 - ❑ *ds3-channel-number*—Number of the ds3 channel
 - ❑ *ds1-channel-number*—Number of the ds1 channel in the range 1–28
 - ❑ *subchannelNumber*—Number of the subchannel in the range 1–24
- *configuration*—Displays the configuration of each controller at the specified level and above
- *layerType*—Type of SONET/SDH layer
 - *section*—Section layer of an interface
 - *line*—Line layer of an interface
 - *path*—SONET or SDH path
- *interval*—Number of 15-minute intervals over which the router monitors information; a value in the range 1–96; default value is the current interval, number 1
- *controllerType*—Type of interface or channel
 - *tributary*—SONET or SDH virtual tributary
 - *e1*—E1 channel over SDH virtual tributary
 - *ds1*—T1 channel over SONET/SDH virtual tributary
 - *ds3*—T3 over channelized SONET interface
 - *t1*—T1 channel on T3 over channelized SONET interface
- *total*—Displays the MIB statistics for all intervals
- *delta*—Displays baselined statistics for all intervals
- *all*—Shows statistics for all time intervals, rather than statistics for selected time intervals
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show controllers sonet remote

- Description** Displays information about the statistics on the remote device when MDL is configured on a T3 over channelized SONET interface or FDL is configured on either a T1 channel on a T3 over channelized SONET interface or a T1 over SONET/SDH interface.
- Syntax** `show controllers sonet { interfaceSpecifier [:controllerSpecifier] remote [all] } [filter]`
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *controllerSpecifier*—One of the following:
 - For a section or line, there is no *controllerSpecifier*
 - For a T3 over channelized SONET interface, specified in the format *pathChannel ds3-channel-number* [*ds1-channel-number*] [*subchannelNumber*]
 - For a T1 over SONET/SDH interface, specified in the format *pathChannel* [*/pathPayload*] [*/tributaryGroup*] [*/tributaryNumber*] [*/channelGroup*]
 - *pathChannel*—Number of the path
 - *pathPayload*—Number of the payload within the path. In SONET mode, *pathPayload* is always 1. In SDH mode, *pathPayload* is the number of the TUG-3 group.
 - *tributaryGroup*—Number of the tributary group within the path. In SONET mode, *tributary group* is the number of the VT group. In SDH mode, tributary group is the number of the TUG-2 group.
 - *tributaryNumber*—Number of the tributary within the group. In SONET mode, *tributaryNumber* is the number of the VT. In SDH mode, *tributaryNumber* is the number of the TUG-1 group or tributary unit.
 - *channelGroup*—Number of the channel group
 - *ds3-channel-number*—Number of the ds3 channel
 - *ds1-channel-number*—Number of the ds1 channel in the range 1–28
 - *subchannelNumber*—Number of the subchannel in the range 1–24
 - *all*—Shows statistics for all time intervals, rather than statistics for selected time intervals
 - *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show controllers t1

Description	Displays information about the T1 controller interfaces.
Syntax	<pre>show controllers t1 [brief { { fractional serial } [interfaceSpecifier] interfaceSpecifier [brief all summary] }] [filter]</pre> <ul style="list-style-type: none"> ■ fractional—Displays information about T1 fractional interfaces ■ serial—Displays information about T1 serial interfaces ■ interfaceSpecifier—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ brief —Abbreviated display of T1 controller information ■ all—Shows statistics for all time intervals, rather than statistics for selected time intervals ■ summary—Displays link status summary ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show controllers t3

Description	Displays information about the T3 controller interfaces.
Syntax	<pre>show controllers t3 [brief { interfaceSpecifier [brief all summary] { ft1 serial } [interfaceSpecifier] }] [filter]</pre> <ul style="list-style-type: none"> ■ interfaceSpecifier—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ brief—Abbreviated display of T3 controller information ■ all—Shows statistics for all time intervals, rather than statistics for selected time intervals ■ summary—Displays link status summary ■ ft1—Displays information about fractional T1 subchannels ■ serial—Displays information about serial interfaces ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show controllers t3 remote

- Description** Displays information about the statistics on the remote device when MDL is configured on a T3 interface or FDL is configured on a T1 channel.
- Syntax** show controllers t3 *interfaceSpecifier* remote [all] [*filter*]
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - all—Shows statistics for all time intervals, rather than statistics for selected time intervals
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show cops info

- Description** Displays information about SDX (formerly SSC) sessions and about the COPS layer created for SDX sessions.
- Syntax** show cops info [*filter*]
- *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show cops statistics

- Description** Displays statistics about SDX (formerly SSC) sessions.
- Syntax** show cops statistics [delta] [*filter*]
- delta—Displays baselined statistics
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show dhcp binding

Description Displays DHCP client binding information.



NOTE: This command replaces the deprecated **show ip dhcp-external binding**, **show ip dhcp-external binding-id**, and **show ip dhcp-local binding** commands, which may be removed completely in a future release.

Syntax To display information for all bindings:
 show dhcp binding [external | local | relay-proxy] [detail] [filter]

To display information for a specific binding:
 show dhcp binding *binding-id*

- external—Displays DHCP external server bindings
- local—Displays DHCP local server bindings
- relay-proxy—Displays DHCP relay proxy bindings
- detail—Shows detailed information for the specified DHCP bindings
- *binding-id*—Specific DHCP binding ID
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.1.0.

Related Topics

- Monitoring DHCP Binding Information

show dhcp relay

Description Displays DHCP relay configuration information and IP addresses of configured DHCP servers.

Syntax show dhcp relay [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Relay Configuration Information

show dhcp relay proxy statistics

Description Displays the statistics of the configured DHCP relay proxy.

Syntax show dhcp relay proxy statistics [delta] [filter]

- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Server and DHCP Relay Agent Statistics

show dhcp relay statistics

Description Displays statistics that are common to both DHCP relay and DHCP relay proxy, and also to display DHCP server statistics for DHCP relay only.

Syntax show dhcp relay statistics [detail] [delta] [filter]

- statistics—Displays statistics for the DHCP relay
- detail—Displays a subset of statistics on a per-DHCP server basis
- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
detail keyword added in JUNOS Release 7.2.0.

Related Topics

- Monitoring DHCP Relay Statistics

show dhcp server

Description Displays the IP address(es) and statistics of the configured DHCP server.

Syntax show dhcp server [statistics [delta]] [filter]

- server—DHCP Proxy Client configuration
- statistics—Displays statistics for the DHCP server or relay agent
- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Server and DHCP Relay Agent Statistics

show dhcp summary

Description Displays the currently configured DHCP applications and indicates whether they are active.

Syntax show dhcp summary

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.2.0.

Related Topics

- Monitoring Status of DHCP Applications

show dhcp vendor-option

Description Displays configuration and action information for the DHCP vendor-option feature.

Syntax show dhcp vendor-option [default | vendor-option-relay-server *ServerAddress*]

- default—Displays where DHCP client packets that do not match a configured vendor-string are sent by default
- vendor-option-relay-server—Displays DHCP string matches that are sent to the specified vendor-option server
- *ServerAddress*—IP address of the DHCP vendor-option server

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.2.0.

Related Topics

- Monitoring DHCP Option 60 Information

show dos-protection-group

Description Displays information about denial of service (DoS) protection groups.

Syntax show dos-protection-group *groupName* rates slot *slotNumber* [*filter*]]

- *groupName*—Name of the DoS protection group
- *rate*—Calculated values for the minimum rate, maximum rate, minimum burst, and maximum burst
- *slotNumber*—Number of the slot
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

show drop-profile

Description Displays information about the drop profile.

Syntax show drop-profile [*dropProfileName*] [*brief* | *references*] [*filter*]]

- *dropProfileName*—Name for the drop profile
- *brief* —Displays information in a condensed format
- *references*—Displays QoS profiles which reference the drop profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Drop Profiles for RED and WRED

show dvmrp destination profile

Description Displays the configuration and status of a destination profile for dynamic DVMRP tunnels. There is no **no** version.

Syntax show dvmrp destination profile [*profileName*]

- *profileName*—Name of the destination profile

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.2.0.

show dvmrp tunnel

Description Displays information about DVMRP tunnels.

Syntax `show dvmrp tunnel [detail] [state tunnelStatus] [tunnelName |
[virtual-router vrName] ip ipAddress [tunnelName]] [filter]`

To display summary information:

`show dvmrp tunnel summary [filter]`

- *detail*—Shows detailed tunnel information about DVMRP tunnels
- *tunnelStatus*—State of tunnels for which information is displayed; one of the following:
 - *disabled*—Tunnel is disabled
 - *down*—Tunnel is not operational
 - *enabled*—Tunnel is enabled
 - *lower-down*—Interface layer below the tunnel is not operational
 - *not-present*—Tunnel service module is not in slot
 - *up*—Tunnel is operational
- *tunnelName*—Name of a tunnel for which you want to display information
- *vrName*—Name of a virtual router for which tunnel information is displayed
- *ipAddress*—IP address associated with tunnel
- *filter*—See *Filtering show Commands in About This Guide*
- *summary*—Displays summary information

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show egress-queue events

Description Displays events that track the number of times egress queuing rates exceed thresholds you have configured.

Syntax `show egress-queue events { interface interfaceType interfaceSpecifier | l2tp session sessionName | tunnel-server interfaceType } [atmVpi | s-vlanIdValue] [explicit | summary] [traffic-class trafficClassName] [event-exceeding eventExceedingNumber { committed | conformed | exceeded | forwarded }] [filter]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *sessionName*—Name of the L2TP session
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *explicit*—Displays events for queues only on the specified interface and not for queues stacked above the interface
- *summary*—Displays the sum of events for the queues bound to interfaces that are stacked above the specified interface
- *trafficClassName*—Name of a traffic class for which egress queue events are displayed
- *eventExceedingNumber*—Number of events, in the range 1–1073741824
- *committed*—Displays queues in which the committed drop count exceeds the *eventExceedingNumber*
- *conformed*—Displays queues in which the conformed drop count exceeds the *eventExceedingNumber*
- *exceeded*—Displays queues in which the exceeded drop count exceeds the *eventExceedingNumber*
- *forwarded*—Displays queues in which the forwarding event count exceeds the *eventExceedingNumber*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
atmVpi and *s-vlanIdValue* variables added in JUNOS Release 7.1.0.

Related Topics

- Monitoring Forwarding and Drop Events on the Egress Queue

show egress-queue rates

Description Displays statistics associated with egress queuing rates.

Syntax `show egress-queue rates [color] [previous | current] [full | brief]
 { interface interfaceType interfaceSpecifier |
 l2tp session sessionName | tunnel-server interfaceType } [atmVpi | s-vlanIdValue]
 [explicit | summary] [traffic-class trafficClassName]
 [rate-exceeding rateExceedingNumber { aggregate | committed | conformed |
 exceeded | forwarded | minimum | maximum }] [filter]`

- *color*—Displays drop rates by color without minimum and maximum rates, rather than as an aggregate of all colors
- *previous*—Displays rate statistics for the previous rate period; the default option
- *current*—Displays rate statistics for the current rate period
- *full*—Displays rate statistics for all queues
- *brief*—Displays rate statistics only for queues that have queue rate statistics enabled; the default option
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *sessionName* —Name of the L2TP session
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *explicit*—Displays rate statistics for queues only on the specified interface and not queues stacked above the interface
- *summary*—Displays the sum of rates for the queues bound to interfaces that are stacked above the specified interface
- *trafficClassName*—Name of a traffic class for which egress queue rate statistics are displayed
- *rateExceedingNumber*—Bits per second in the range 1–1073741824
- *aggregate*—Displays queues in which the aggregate drop rate exceeds the *rateExceedingNumber*
- *committed*—Displays queues in which the committed drop rate exceeds the *rateExceedingNumber*
- *conformed*—Displays queues in which the conformed drop rate exceeds the *rateExceedingNumber*

- *exceeded*—Displays queues in which the exceeded drop rate exceeds the *rateExceedingNumber*
- *forwarded*—Displays queues in which the forwarding rate exceeds the *rateExceedingNumber*
- *minimum*—Displays queues in which the minimum queue rate exceeds the *rateExceedingNumber*
- *maximum*—Displays queues in which the maximum queue rate exceeds the *rateExceedingNumber*
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
atmVpi and *s-vlanIdValue* variables added in JUNOS Release 7.1.0.

Related Topics

- Monitoring Forwarding and Drop Rates on the Egress Queue
- Troubleshooting Memory and Processor Use for Egress Queue Rate Statistics and Events

show environment

Description Displays information about the router's physical environment, such as power and temperature.

Syntax show environment [*all*] [*table*] [*filter*]

- *all*—Displays router environment information and temperature status table
- *table*—Displays temperature status table only
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show exception dump

Description Displays the parameters for transferring core dump files.

Syntax show exception dump [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show exception monitor

Description Displays information about core dump monitor status and configuration.

Syntax show exception monitor [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show fabric-queue

Description Displays forwarded and dropped statistics for the queues in the fabric.

Syntax show fabric-queue [traffic-class *trafficClassName* [detail] |
egress-slot *egressSlotNumber* | detail |
traffic-class *trafficClassName* egress-slot *egressSlotNumber*] [*filter*]

- *trafficClassName*—Name of the traffic class
- detail—Provides detailed information about the queues in the fabric
- *egressSlotNumber*—Number of the egress slot
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Queue Statistics for the Fabric

show fabric weights

Description Displays the multicast-to-unicast ratio for the router switch fabric.

Syntax show fabric weights

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show flash

Description Displays information about installed flash cards.

Syntax show flash

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show forwarding-table route-holddown

Description Displays the configured route hold-down time (in seconds) that is allowed after an initial routing table change for the accumulation and subsequent distribution of a set of routing table updates to the line modules.

Syntax show forwarding-table route-holddown

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show frame-relay interface

Description Displays Frame Relay statistics for interfaces.

Syntax show frame-relay interface [*interfaceType interfaceSpecifier*] [*members*] [*brief*] [*delta*] [*filter*]

- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - serial
 - pos
 - mlframe-relay
 - tunnel—GRE tunnel
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *members*—Displays the status of MLFR links
 - displays the status of all MLFR links if you specify the interface type **mlframe-relay** without a specifier for an MLFR bundle
 - displays the status of MLFR links in an MLFR bundle if you specify that bundle
- *brief*—Displays a summary of interface information
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show frame-relay lip

Description	Displays Link Integrity Protocol state and statistics for a link in an MLFR bundle.
Syntax	<pre>show frame-relay lip [interface <i>interfaceType interfaceSpecifier</i>] [brief] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—One of the following interface types listed in <i>Interface Types and Specifiers</i> in <i>About This Guide</i>: <ul style="list-style-type: none"> ■ serial ■ pos ■ <i>interfaceSpecifier</i>—Particular interface in the format <i>slot/port:link</i>: <ul style="list-style-type: none"> ■ <i>slot</i>—Number of the chassis slot of the line module in the range 0–13 (ERX-14xx models) and 0–6 (ERX-7xx models) ■ <i>port</i>—Port number in the range 0–2 ■ <i>link</i>—Number of a link in the range 1–8 ■ brief—Summarized format ■ delta—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show frame-relay lmi

Description	Displays state and statistics for the local management interface.
Syntax	<pre>show frame-relay lmi [interface <i>interfaceType interfaceSpecifier</i>] [brief] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—One of the following interface types listed in <i>Interface Types and Specifiers</i> in <i>About This Guide</i>: <ul style="list-style-type: none"> ■ serial ■ pos ■ mlframe-relay ■ tunnel—GRE tunnel ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ brief—Summarized format ■ delta—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show frame-relay map

Description Displays the current Frame Relay map entries and information about the Frame Relay connections.

Syntax show frame-relay map [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show frame-relay multilinkInterface

Description Displays statistics about all MLFR interfaces or the specified MLFR interfaces.

Syntax show frame-relay multilinkInterface [*interfaceType interfaceSpecifier*] [*brief*] [*delta*] [*filter*]

- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - serial
 - pos
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *brief* —Displays a summary of interface information
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show frame-relay pvc

Description	Displays permanent virtual circuit statistics for Frame Relay or MLFR interfaces.
Syntax	<pre>show frame-relay pvc [dlcI interface interfaceType interfaceSpecifier] [brief] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>dlcI</i>—DLCI number to be used on the specified subinterface to identify a virtual circuit in the range 16–1007 ■ <i>interfaceType</i>—One of the following interface types listed in <i>Interface Types and Specifiers</i> in <i>About This Guide</i>: <ul style="list-style-type: none"> ■ serial ■ pos ■ mlframe-relay ■ tunnel—GRE tunnel ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>brief</i>—Displays the abbreviated version of the command output ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show frame-relay subinterface

Description	Displays statistics about Frame Relay subinterfaces.
Syntax	<pre>show frame-relay subinterface [interfaceType interfaceSpecifier] [brief] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—One of the following interface types listed in <i>Interface Types and Specifiers</i> in <i>About This Guide</i>: <ul style="list-style-type: none"> ■ serial ■ pos ■ mlframe-relay ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>brief</i>—Displays a summary of subinterface information ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring the Policy Configuration of Frame Relay Subinterfaces

show frame-relay summary

Description Scans all defined Frame Relay interfaces and circuits and reports aggregate status counts.

Syntax show frame-relay summary [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ftp-server

Description Displays information about the FTP server.

Syntax show ftp-server

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show gre destination profile

Description Displays the configuration and status of a destination profile for dynamic GRE tunnels. There is no **no** version.

Syntax show gre destination profile [*profileName*]
■ *profileName*—Name of the destination profile

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.2.0.

show gre tunnel

Description	Displays information about GRE tunnels.
Syntax	<pre>show gre tunnel [detail] [state <i>tunnelStatus</i>] [<i>tunnelName</i> [virtual-router <i>vrName</i>] ip <i>ipAddress</i>] [<i>filter</i>] [summary]</pre> <p>To display summary information:</p> <pre>show gre tunnel summary [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ detail—Shows detailed tunnel information about GRE tunnels ■ <i>tunnelStatus</i>—State of tunnels for which information is displayed; one of the following: <ul style="list-style-type: none"> ■ disabled—Tunnel is disabled ■ down—Tunnel is not operational ■ enabled—Tunnel is enabled ■ lower-down—Interface layer lower below the tunnel is not operational ■ not-present—Tunnel service module is not in slot ■ up—Tunnel is operational ■ <i>tunnelName</i>—Name of a tunnel for which you want to display information ■ <i>vrName</i>—Name of a virtual router for which tunnel information is displayed ■ <i>ipAddress</i>—IP address associated with tunnel ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i> ■ summary—Displays summary information
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring GRE Tunnel Information

show hardware

Description	Displays information about the modules installed in the router.
Syntax	<pre>show hardware [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show hdlc interface

Description Displays statistics about specified Cisco HDLC interfaces.

Syntax `show hdlc interface [{ dataRestriction [dataRestriction]* } | full]
[delta] [stateRestriction] [{ interfaceType } interfaceSpecifier] [filter]`

- *dataRestriction*—Specify one or more of the following keywords:
 - *config*—Displays information about the HDLC interface configuration
 - *status*—Displays information about the HDLC interface operational status
 - *statistics*—Displays information about the HDLC interface statistics
- ***—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *full*—Displays configuration, status, and statistics information; equivalent to specifying **config status statistics**
- *delta*—Displays baselined statistics
- *stateRestriction*—Specify only one of the following keywords:
 - *open*—Displays an interface that is administratively enabled, which means that the **no ppp shutdown** command is operational
 - *closed*—Displays an interface that is administratively disabled, which means that the **ppp shutdown** command is operational
 - *up*—Displays an interface that is up, which means that the LCP has been negotiated
 - *down*—Displays an interface that is down, which means that the LCP has not been negotiated, the negotiations have failed, or the connection has been terminated
 - *lower-layer-down*—Displays an interface that is not up and is waiting for the lower layer to come up to initiate negotiations for LCP
 - *not present*—Displays an interface on which traffic cannot flow because hardware is unavailable
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show hosts

- Description** Displays a list of configured network servers.
- Syntax** `show hosts [filter]`
- *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show hotfix

- Description** Displays information for any hotfix available on the local file system. The information includes name and ID of the hotfix, activation and arming status, and any other required hotfixes.
- Syntax** `show hotfix [hfixFileName] [detail]`
- *hfixFileName*—Name of a hotfix software file (.hfx) on the local file system
 - *detail*—Displays a synopsis describing the purpose of each hotfix; when you also specify a particular hotfix, displays additional details about that hotfix
- Mode** User Exec
- Release Information** Command introduced in JUNOS Release 7.2.0.

show ike certificates

- Description** Displays the IKE certificates configured on the E-series router.



NOTE: This command has been replaced by the **show ipsec certificates** command and may be removed completely in a future release.

- Syntax** `show ike certificates { all | crl | peer | public-certs | root-cas } [hex-format] [filter]`
- *all*—Displays all certificates configured on the router
 - *crl*—Displays certificate revocation lists
 - *peer*—Displays peer certificates
 - *public-certs*—Displays public certificates
 - *root-cas*—Displays root CA certificates
 - *hex-format*—Displays certificate data in hexadecimal format
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show ike configuration

Description Displays a summary of the IKE configuration.



NOTE: This command has been replaced by the **show ipsec ike-configuration** command and may be removed completely in a future release.

Syntax show ike configuration [*filter*]
■ *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ike identity

Description Displays the IKE identity configuration.



NOTE: This command has been replaced by the **show ipsec identity** command and may be removed completely in a future release.

Syntax show ike identity [*filter*]
■ *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ike policy-rule

Description Displays configuration of IKE phase 1 policy rules.



NOTE: This command has been replaced by the **show ipsec ike-policy-rule** command and may be removed completely in a future release.

Syntax show ike policy-rule [*filter*]
■ *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ike sa

Description Displays IKE phase 1 SAs running on the router.



NOTE: This command has been replaced by the **show ipsec ike-sa** command and may be removed completely in a future release.

Syntax show ike sa [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show interfaces

Description Displays the current state of the interface you specify.

Syntax show interfaces *interfaceType interfaceSpecifier* [*delta*] [*brief*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers in About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers in About This Guide*; for ATM, subinterfaces are not supported by the syntax
- *delta*—Displays baselined statistics
- *brief*—Displays a brief summary of the interface
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring the QoS Configuration of ATM Interfaces
- Monitoring the QoS Configuration of Fast Ethernet, Gigabit Ethernet, and 10-Gigabit Ethernet Interfaces
- Monitoring Interfaces and Policy Lists

show interfaces lag

- Description** Displays information about a specified Ethernet member link in an IEEE 802.3ad link aggregation group (LAG) bundle.
- Syntax** show interfaces *interfaceType interfaceSpecifier lag [filter]*
- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*
 - fastEthernet
 - gigabitEthernet
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show interfaces lag members

- Description** Displays information about the Ethernet member links in all IEEE 802.3ad link aggregation group (LAG) bundles configured on the router, or about the member links in a specified IEEE 802.3ad LAG bundle.
- Syntax** show interfaces lag [*interfaceSpecifier*] members [*filter*]
- *interfaceSpecifier*—LAG interface specifier; see *Interface Types and Specifiers* in *About This Guide*
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.
- Related Topics**
- Monitoring the QoS Configuration of IEEE 802.3ad Link Aggregation Group Bundles

show ip

- Description** Displays general information for IP.
- Syntax** show ip [*filter*]
- *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show ip address

Description	Displays interface information for the specified IP address.
Syntax	<pre>show ip address [vrfName] [brief detail] localAddress [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>brief</i>—Displays summary information about the interface ■ <i>detail</i>—Displays detailed information about the interface ■ <i>localAddress</i>—IP address of the specific interface ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip as-path-access-list

Description	Displays information about AS-path access lists.
Syntax	<pre>show ip as-path-access-list [accessListName] [filter]</pre> <ul style="list-style-type: none"> ■ <i>accessListName</i>—Name of an AS-path access list ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip bgp

Description Displays filtered information about a specified network, or all networks, in the BGP routing table associated with a specified address family or all address families. Only those fields that you specify are displayed, except that the prefix field is always displayed. Default fields can be set with the **default-fields route** command.

Syntax To display information about networks for all address families or for a specific address family other than the L2VPN address family and the route-target address family:

```
show ip bgp [ ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName ]  
[ network [ networkMask [ longer-prefixes ] ] ] [ fields fieldOptions ] [ filter ]
```

To display information for networks associated with only the L2VPN address family:

```
show ip bgp l2vpn { all | vpls vplsName | vpws vpwsName }  
[ site-id siteId block-offset blockOffset ] [ fields fieldOptions ] [ filter ]
```

To display information for networks associated with only the route-target address family:

```
show ip bgp route-target signaling rtfPrefix [ longer-prefixes ]  
[ fields fieldOptions ] [ filter ]
```

- *ipv4 unicast*—Specifies the IPv4 unicast address family and routing table; the default option
- *ipv4 multicast*—Specifies the IPv4 multicast address family and routing table
- *vpnv4 all*—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- *vpnv4 vrf vrfName*—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- *network*—IP address for which the best matching route is displayed; if no network is specified, displays the fields for all networks
- *networkMask*—Address mask to be applied to the network address
- *longer-prefixes*—Displays all routes with a prefix that is equal to or more specific than the specified prefix
- *l2vpn all*—Specifies all VPLS instances in the L2VPN address family
- *l2vpn vpls vplsName*—Specifies the VPLS instance with the name *vplsName*
- *l2vpn vpws vpwsName*—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- *siteId*—Numerical identifier for the site; must be an unsigned 16-bit integer greater than zero that is unique across the VPLS domain
- *blockOffset*—Integer in the range 1–65535 that identifies a block offset for which information is displayed
- *route-target signaling*—Specifies the route-target address family

- *rtfPrefix*—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
 - *asNumber*—AS number for origin of route target information, in the range 1–4294967295
 - *extendedCommunity*—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
 - *number1*—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
 - *number2*—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number
 - *prefixLength*—Number that specifies the length of the route prefix, in the range 32–96
- *fields*—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*
 - all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - afi—Address family identifier
 - aggregator—AS number and IP address of aggregator
 - as-path—AS path through which this route has been advertised
 - atomic-aggregate—Whether the atomic aggregate attribute is present
 - best—Whether this is the best route for the prefix
 - clusters—List of cluster IDs through which the route has been advertised
 - communities—Community number associated with the route
 - extended-communities—Extended community
 - imported—Whether the route was imported
 - intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
 - in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
 - loc-pref—Local preference for the route
 - med—Multiexit discriminator for the route

- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vppls keyword and *vpplsName* variable added in JUNOS Release 7.1.0.
site-id keyword and *siteId* variable added in JUNOS Release 7.1.0.
block-offset keyword and *blockOffset* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords and *rtMemNlri* variable added in JUNOS Release 8.2.0.
rtMemNlri variable replaced by *rtfPrefix* variable in JUNOS Release 9.1.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs
- Monitoring Layer 2 NLRI for VPLS Instances

show ip bgp advertised-routes

Description Displays the routes in the Adj-RIBs-Out table of the specified peer or peer group. For peers, displays routes that have been previously advertised to the peer and the attributes for the routes before the application of outbound policy.

For peer groups, displays routes that will be advertised to the peer group, but includes the full set of route attributes associated with the routes after the application of outbound policy. This command returns an error message unless you first enable rib-out with the **no neighbor rib-out disable** command or the **no rib-out disable** command.

Syntax To display routes advertised to a neighbor or peer group in all address families or a particular address family:

```
show ip bgp [ ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName |
l2vpn [ all ] | route-target signaling ]
{ neighbors { ipAddress | ipv6Address } | peer-group peerGroupName }
advertised-routes [ fields { fieldOptions } ] [ delta ] [ filter ]
```

To display routes advertised to the specified peer group for all VPN address families or for a particular VPN address family after the application of route-target filters advertised by the specified member of the peer group:

```
show ip bgp [ vpnv4 all | vpnv4 vrf vrfName ] | l2vpn [ all ] | route-target signaling ]
peer-group peerGroupName advertised-routes
route-target-filter neighbor { ipRtfnbrAddress | ipv6RtfnbrAddress }
[ fields { pgfieldOptions } ] [ delta ] [ filter ]
```

To display the route that best matches the specified address for all address families or for a particular address family; not available for the L2VPN address family:

```
show ip bgp [ ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName ]
{ neighbors { ipAddress | ipv6Address } | peer-group peerGroupName }
advertised-routes network [ networkMask [ longer-prefixes ] ]
[ fields { fieldOptions } ] [ delta ] [ filter ]
```

To display routes advertised to a neighbor or peer group with the specified site ID and block offset in the L2VPN address family:

```
show ip bgp l2vpn all
{ neighbors { ipAddress | ipv6Address } | peer-group peerGroupName }
advertised-routes site-id siteId block-offset blockOffset
[ fields { fieldOptions } ] [ delta ] [ filter ]
```

To display all routes or the route that best matches the specified address advertised to a neighbor or peer group in only the route-target address family:

```
show ip bgp route-target signaling
{ neighbors { ipAddress | ipv6Address } | peer-group peerGroupName }
advertised-routes rtPrefix [ longer-prefixes ]
[ fields { fieldOptions } ] [ delta ] [ filter ]
```

- **ipv4 unicast**—Specifies the IPv4 unicast address family and routing table; the default option
- **ipv4 multicast**—Specifies the IPv4 multicast address family and routing table
- **vpnv4 all**—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- **vpnv4 vrf vrfName**—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*

- *l2vpn all*—Displays information for only the L2VPN address family; the **all** keyword is optional unless you specify a site ID and block offset
- *route-target signaling*—Specifies the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- *peerGroupName*—Name of a BGP peer group
- *route-target-filter neighbor*—Displays routes actually advertised to the specified peer group member (neighbor); which routes are advertised is determined by the application of the route-target filter received from that neighbor to routes in the peer group's Adj-RIBs-Out table
- *ipRtfNbrAddress*—IP address of a peer group member that has advertised route-target membership filtering information
- *ipv6RtfNbrAddress*—IPv6 address of a peer group member that has advertised route-target membership filtering information
- *network*—Route that best matches this IP address; if no network is specified, displays the fields for all networks
- *networkMask*—Address mask to be applied to the network address
- *longer-prefixes*—Displays all routes with a prefix that is equal to or more specific than the specified prefix
- *siteId*—Numerical identifier for the site; must be an unsigned 16-bit integer greater than zero that is unique across the VPLS domain
- *blockOffset*—Integer in the range 1–65535 that identifies a block offset for which information is displayed
- *rtfPrefix*—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
 - *asNumber*—AS number for origin of route target information, in the range 1–4294967295
 - *extendedCommunity*—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
 - *number1*—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
 - *number2*—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number

- *prefixLength*—Number that specifies the length of the route prefix, in the range 32–96
- *fields*—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
all | [afi | aggregator | as-path | atomic-aggregate | best | clusters |
communities | extended-communities | imported | intro | in-label | loc-pref |
med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |
peer-type | rd | safi | stale | unknown-types | weight]*

For peers, all described options are available. For peer groups, all options are available except the following:

best | imported | intro | next-hop-cost | peer | peer-type | stale | weight

- all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- afi—Address family identifier
- aggregator—AS number and IP address of aggregator
- as-path—AS path through which this route has been advertised
- atomic-aggregate—Whether the atomic aggregate attribute is present
- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers

- `peer`—IP address of BGP peer from which route was learned
- `peer-type`—Type of BGP peer: internal, external, or confederation
- `rd`—Route distinguisher
- `safi`—Subsequent address family identifier
- `stale`—Route that has gone stale due to peer restart
- `unknown-types`—Attribute codes for unknown path attributes
- `weight`—Weight of the route
- `*`—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- `delta`—Displays baselined statistics
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
site-id keyword and *siteId* variable added in JUNOS Release 7.1.0.
block-offset keyword and *blockOffset* variable added in JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling and **route-target-filter neighbor** keywords and *ipRtfnbrAddress*, *ipv6RtfnbrAddress*, and *rtMemNlri* variables added in JUNOS Release 8.2.0.
rtMemNlri variable replaced by *rtfPrefix* variable in JUNOS Release 9.1.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp aggregate-address

Description Displays information about aggregate addresses.

Syntax show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName] aggregate-address [*ipAddress mask*] [*filter*]

- *ipv4 unicast*—Specifies the IPv4 unicast address family and routing table; the default option
- *ipv4 multicast*—Specifies the IPv4 multicast address family and routing table
- *vpnv4 all*—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- *vpnv4 vrf vrfName*—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- *ipAddress*—Aggregate address
- *mask*—Aggregate address mask
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip bgp cidr-only

Description Displays information only about routes having nonnatural network masks.

Syntax show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName] cidr-only [fields { *fieldOptions* }] [*filter*]

- *ipv4 unicast*—Specifies the IPv4 unicast address family and routing table; the default option
- *ipv4 multicast*—Specifies the IPv4 multicast address family and routing table
- *vpnv4 all*—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- *vpnv4 vrf vrfName*—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- *fields*—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
all | [*afi* | *aggregator* | *as-path* | *atomic-aggregate* | *best* | *clusters* | *communities* | *extended-communities* | *imported* | *intro* | *in-label* | *loc-pref* | *med* | *next-hop* | *next-hop-cost* | *origin* | *originator-id* | *out-label* | *peer* | *peer-type* | *rd* | *safi* | *stale* | *unknown-types* | *weight*]*
 - *all*—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - *afi*—Address family identifier
 - *aggregator*—AS number and IP address of aggregator
 - *as-path*—AS path through which this route has been advertised
 - *atomic-aggregate*—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip bgp community

Description Displays routes that belong to the specified BGP community.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] community { communityNumber | local-as | no-advertise | no-export } [communityNumber | local-as | no-advertise | no-export]* [exact-match] [fields fieldOptions] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Specifies the route-target address family
- *communityNumber*—Filters routes according to this community number, specified either as a number in the range 1–4294967295 or in *AA:NN* format (autonomous system number:community number); displays only routes that are members of the specified community
- `local-as`—Displays only routes belonging to the local-AS community
- `no-advertise`—Displays only routes belonging to the no-advertise community
- `no-export`—Displays only routes belonging to the no-export community
- `*`—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- `exact-match`—Displays only routes that have exactly the specified communities
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format `all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - *afi*—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp community-list

Description Displays routes that belong to the BGP community specified by the community list.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] community-list communityListName [exact-match] [fields fieldOptions] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Specifies the route-target address family
- `communityListName`—Filters routes according to community list; displays only routes that are members of a community on the specified list
- `exact-match`—Displays only routes that have exactly the specified communities
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format `all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp dampened-paths

Description Displays information about dampened BGP routes.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] dampened-paths [fields fieldOptions] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Specifies the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format `all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp filter-list

Description	Displays all routes whose AS path matches the specified AS path access list.
Syntax	<pre>show ip bgp [ipv4 unicast ipv4 multicast vpnv4 all vpnv4 vrf <i>vrfName</i> l2vpn all l2vpn vpls <i>vplsName</i> l2vpn vpws <i>vpwsName</i> route-target signaling] filter-list <i>asPathAccessListName</i> [fields <i>fieldOptions</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>ipv4 unicast</i>—Specifies the IPv4 unicast address family and routing table; the default option ■ <i>ipv4 multicast</i>—Specifies the IPv4 multicast address family and routing table ■ <i>vpnv4 all</i>—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances ■ <i>vpnv4 vrf vrfName</i>—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name <i>vrfName</i> ■ <i>l2vpn all</i>—Specifies all VPLS instances in the L2VPN address family ■ <i>l2vpn vpls vplsName</i>—Specifies the VPLS instance with the name <i>vplsName</i> ■ <i>l2vpn vpws vpwsName</i>—Specifies the L2VPN (VPWS) instance with the name <i>vpwsName</i> ■ <i>route-target signaling</i>—Displays information for only the route-target address family ■ <i>asPathAccessListName</i>—Name of AS path access list to filter routes; displays only routes that have AS paths matching the specified list ■ <i>fields</i>—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them ■ <i>fieldOptions</i>—Fields to be displayed, in the format all [<i>afi</i> <i>aggregator</i> <i>as-path</i> <i>atomic-aggregate</i> <i>best</i> <i>clusters</i> <i>communities</i> <i>extended-communities</i> <i>imported</i> <i>intro</i> <i>in-label</i> <i>loc-pref</i> <i>med</i> <i>next-hop</i> <i>next-hop-cost</i> <i>origin</i> <i>originator-id</i> <i>out-label</i> <i>peer</i> <i>peer-type</i> <i>rd</i> <i>safi</i> <i>stale</i> <i>unknown-types</i> <i>weight</i>]* <ul style="list-style-type: none"> ■ <i>all</i>—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read ■ <i>afi</i>—Address family identifier ■ <i>aggregator</i>—AS number and IP address of aggregator ■ <i>as-path</i>—AS path through which this route has been advertised ■ <i>atomic-aggregate</i>—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp flap-statistics

Description	Displays information about routes that are dampened.
Syntax	<p>To display information about dampened routes for address families other than the L2VPN and route-target signaling address families:</p> <pre>show ip bgp [ipv4 unicast ipv4 multicast vpnv4 all vpnv4 vrf <i>vrfName</i>] flap-statistics [<i>network</i> [<i>networkMask</i>]] [<i>filter</i>]</pre> <p>To display information about dampened routes for only the route-target signaling address family:</p> <pre>show ip bgp route-target signaling flap-statistics [<i>rtfPrefix</i> <i>rtfAddress</i>] [<i>filter</i>]</pre> <p>To display information about dampened routes for only the L2VPN address family:</p> <pre>show ip bgp { l2vpn all l2vpn vpls <i>vplsName</i> l2vpn vpws <i>vpwsName</i> } flap-statistics [<i>site-id</i> <i>siteId</i> <i>block-offset</i> <i>blockOffset</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>ipv4 unicast</i>—Specifies the IPv4 unicast address family and routing table; the default option ■ <i>ipv4 multicast</i>—Specifies the IPv4 multicast address family and routing table ■ <i>vpnv4 all</i>—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances ■ <i>vpnv4 vrf vrfName</i>—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name <i>vrfName</i> ■ <i>network</i>—IP address of the network for which you want information displayed; if no network is specified, the fields are displayed for all networks ■ <i>networkMask</i>—Address mask to be applied to the network address ■ <i>route-target signaling</i>—Displays information for only the route-target address family ■ <i>rtfPrefix</i>—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format <i>asNumber:extendedCommunity/prefixLength</i> (for example, 320:320:524/36) where: <ul style="list-style-type: none"> ■ <i>asNumber</i>—AS number for origin of route target information, in the range 1–4294967295 ■ <i>extendedCommunity</i>—Two-part number in the format <i>number1:number2</i> that identifies an extended community of VPNs, in the format <i>number1:number2</i>, where: <ul style="list-style-type: none"> □ <i>number1</i>—Autonomous system (AS) number, in the range 1–4294967295, or an IP address □ <i>number2</i>—Unique integer, in the range 1–4294967295; 32 bits if <i>number1</i> is a 16-bit AS number; 16 bits if <i>number1</i> is an IP address or a 32-bit AS number ■ <i>prefixLength</i>—Number that specifies the length of the route prefix, in the range 32–96 ■ <i>rtfAddress</i>—<i>rtfPrefix</i> with a prefix length of 96; representing the route-target membership NLRI (RT-MEM-NLRI), in the format <i>asNumber:extendedCommunity</i> (for example, 320:320:524 or 320:50.2.3.4:524) ■ <i>l2vpn all</i>—Specifies all VPLS instances in the L2VPN address family ■ <i>l2vpn vpls vplsName</i>—Specifies the VPLS instance with the name <i>vplsName</i> ■ <i>l2vpn vpws vpwsName</i>—Specifies the L2VPN (VPWS) instance with the name <i>vpwsName</i>

- *siteId*—Numerical identifier for the site; must be an unsigned 16-bit integer greater than zero that is unique across the VPLS domain
- *blockOffset*—Integer in the range 1–65535 that identifies a block offset for which information is displayed
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
site-id keyword and *siteId* variable added in JUNOS Release 7.1.0.
block-offset keyword and *blockOffset* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords and *rtMemNlri* variable added in JUNOS Release 8.2.0.
rtMemNlri variable replaced by two variables, *rtfAddress* and *rtfPrefix*, in JUNOS Release 9.1.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp inconsistent-as

Description Displays information only about routes with inconsistent AS paths.

Syntax `show ip bgp`
`[ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | route-target signaling]`
`inconsistent-as [fields { fieldOptions }] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `route-target signaling`—Displays information for only the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters |`
`communities | extended-communities | imported | intro | in-label | loc-pref |`
`med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |`
`peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show ip bgp neighbors

Description Displays information about the BGP neighbors.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn [all] | route-target signaling] neighbors [ipAddress | ipv6Address] [delta] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn`—Displays information for only the L2VPN address family
- `all`—Optional keyword; has no effect
- `route-target signaling`—Displays information for only the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- `delta`—Displays baselined statistics
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp neighbors dampened-routes

- Description** Displays information about routes with a dampening history for the specified BGP neighbor.
- Syntax** `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn [all] | route-target signaling] neighbors { ipAddress | ipv6Address } dampened-routes [fields fieldOptions] [delta] [filter]`
- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
 - `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
 - `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
 - `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
 - `l2vpn`—Displays information for only the L2VPN address family
 - `all`—Optional keyword; has no effect
 - `route-target signaling`—Displays information for only the route-target address family
 - `ipAddress`—IP address of a neighbor whose routes the router has learned
 - `ipv6Address`—IPv6 address of a neighbor whose routes the router has learned
 - `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
 - `fieldOptions`—Fields to be displayed, in the format `all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp neighbors paths

Description Displays path information for the specified BGP neighbor.

Syntax show ip bgp
[ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf *vrfName* | route-target signaling]
neighbors { *ipAddress* | *ipv6Address* } paths [*regularExpression*] [*filter*]

- *ipv4 unicast*—Specifies the IPv4 unicast address family and routing table; the default option
- *ipv4 multicast*—Specifies the IPv4 multicast address family and routing table
- *vpnv4 all*—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- *vpnv4 vrf vrfName*—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- *route-target signaling*—Displays information for only the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- *regularExpression*—Regular expression to match the AS path. See **show ip bgp regexp** for information about regular expressions.
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

show ip bgp neighbors received prefix-filter

Description Displays prefix-list outbound route filters received from the neighbor.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName]
neighbors { ipAddress | ipv6Address } received prefix-filter [filter]`

- *ipv4 unicast*—Specifies the IPv4 unicast address family and routing table; the default option
- *ipv4 multicast*—Specifies the IPv4 multicast address family and routing table
- *vpnv4 all*—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- *vpnv4 vrf vrfName*—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.

show ip bgp neighbors received-routes

Description Displays routes originating from the specified BGP neighbor before inbound policy is applied.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | route-target signaling] neighbors { ipAddress | ipv6Address } received-routes [fields fieldOptions] [delta] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn`—Displays information for only the L2VPN address family
- `all`—Optional keyword; has no effect
- `route-target signaling`—Displays information for only the route-target address family
- *ipAddress*—IP address of a neighbor whose routes the router has learned
- *ipv6Address*—IPv6 address of a neighbor whose routes the router has learned
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
`all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp neighbors routes

Description Displays routes originating from the specified BGP neighbor after inbound policy is applied.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn [all] | route-target signaling] neighbors { ipAddress | ipv6Address } routes [fields fieldOptions] [delta] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn`—Displays information for only the L2VPN address family
- `all`—Optional keyword; has no effect
- `route-target signaling`—Displays information for only the route-target address family
- `ipAddress`—IP address of a neighbor whose routes the router has learned
- `ipv6Address`—IPv6 address of a neighbor whose routes the router has learned
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format `all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*`
 - `all`—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
 - `afi`—Address family identifier
 - `aggregator`—AS number and IP address of aggregator
 - `as-path`—AS path through which this route has been advertised
 - `atomic-aggregate`—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
ipv6Address variable added in JUNOS Release 8.0.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp network

Description Displays information about a potentially originated prefix that was configured with the **network** command.

Syntax To display information about a prefix configured for all address families or for a specific address family other than the route-target address family:

```
show ip bgp [ ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName ]  
network [ networkNumber [ [ mask ] networkMask ] ] [ filter ]
```

To display information about about a prefix configured for the route-target address family:

```
show ip bgp route-target signaling network [ rtfPrefix ] [ filter ]
```

- **ipv4 unicast**—Specifies the IPv4 unicast address family and routing table; the default option
- **ipv4 multicast**—Specifies the IPv4 multicast address family and routing table
- **vpnv4 all**—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- **vpnv4 vrf vrfName**—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- **networkNumber**—IP address of the network for which you want information displayed; if no network is specified, the fields are displayed for all networks
- **networkMask**—Address mask to be applied to the network address
- **route-target signaling**—Displays information for only the route-target address family
- **rtfPrefix**—Prefix representing the route-target membership NLRI (RT-MEM-NLRI), in the format *asNumber:extendedCommunity/prefixLength* (for example, 320:320:524/36) where:
 - **asNumber**—AS number for origin of route target information, in the range 1–4294967295
 - **extendedCommunity**—Two-part number in the format *number1:number2* that identifies an extended community of VPNs, in the format *number1:number2*, where:
 - **number1**—Autonomous system (AS) number, in the range 1–4294967295, or an IP address
 - **number2**—Unique integer, in the range 1–4294967295; 32 bits if *number1* is a 16-bit AS number; 16 bits if *number1* is an IP address or a 32-bit AS number
 - **prefixLength**—Number that specifies the length of the route prefix, in the range 32–96
- **filter**—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
route-target signaling keywords and *rtMemNlri* variable added in JUNOS Release 9.0.0.
rtMemNlri variable replaced by *rtfPrefix* variable in JUNOS Release 9.1.0.

show ip bgp next-hops

Description Displays information about BGP next hops.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName } | route-target signaling] next-hops [ipAddress] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Displays information for only the route-target address family
- *ipAddress*—Displays information only for this indirect next hop
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs
- Monitoring BGP Next Hops for L2VPNs
- Monitoring BGP Next Hops for VPLS

show ip bgp paths

Description Displays information about BGP AS paths.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] paths [regularExpression] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Displays information for only the route-target address family
- *regularExpression*—Regular expression to match that specifies the desired AS paths. See **show ip bgp regexp** for information about regular expressions.
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp peer-group

Description Displays information about BGP peer groups.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn [all] | route-target signaling] peer-group [peerGroupName] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn`—Displays information for only the L2VPN address family
- `all`—Optional keyword; has no effect
- `route-target signaling`—Displays information for only the route-target address family
- *peerGroupName*—Name of the BGP peer group
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp quote-regexp

Description Displays information about BGP routes whose AS path matches the specified regular expression. Regular expressions match numbers for which the specified path is a substring—for example, if you specify *20*, *200* matches because *20* is a substring of *200*. You can disallow substring matching by using the underscore (`_`) metacharacter to constrain matching to the specified pattern; for example, *_20_*. You can use output filtering on the display.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] quote-regexp pathExpression [fields fieldOptions] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Displays information for only the route-target address family
- `quote-regexp`—Indicates that only a single element is matched
- *pathExpression*—Regular expression string describing the AS path or community to be matched. You must enclose elements containing a space within double quotes (“*one element*”).

Each element is either an AS number, a metacharacter, or a combination:

- `^` Matches the beginning of the path unless appearing as the first character within brackets; see below
- `[^]` Matches any AS number except the ones specified within the brackets
- `$` Matches the end of the path
- `{` Matches the beginning of an AS_SET
- `}` Matches the end of an AS_SET
- `(` Matches the start of an AS_CONFED_SET or AS_CONFED_SEQ
- `)` Matches the end of an AS_CONFED_SET or AS_CONFED_SEQ
- `.` Matches any single character

- * Matches zero or more occurrences of the preceding character
- + Matches one or more occurrences of the preceding character
- ? Matches zero or one occurrence of the preceding character. To use the ? metacharacter in a regular expression, you must enter the following key sequence: Ctrl-v-?. Otherwise, the CLI considers this to be a request for assistance in completing the command, rather than understanding it as a metacharacter.
- () Used with a multiplier metacharacter (*, +, ?) to specify patterns for multiple use. You can specify that a parenthesis be construed as a literal token instead of a metacharacter by immediately preceding it with a backslash:
- \(matches the beginning of an AS_CONFED_SET or AS_CONFED_SEQ
- \) matches the end of an AS_CONFED_SET or AS_CONFED_SEQ.
- [] Matches any enclosed character; specifies a range of single characters
- Used within brackets to specify a range of AS numbers
- _ Matches a ^, a \$, a comma, a space, a {, or a }. Placed on either side of a string to specify a literal and disallow substring matching. Numerals enclosed by underscores can be preceded or followed by any of the characters listed above.
- | Matches characters on either side of the metacharacter; logical OR
- **fields**—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- ***fieldOptions***—Fields to be displayed, in the format
all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*
- all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- afi—Address family identifier
- aggregator—AS number and IP address of aggregator
- as-path—AS path through which this route has been advertised
- atomic-aggregate—Whether the atomic aggregate attribute is present

- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route
- out-label—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp regexp

Description Displays information about BGP routes whose AS path matches the specified regular expression. Regular expressions match numbers for which the specified path is a substring—for example, if you specify *20*, *200* matches because *20* is a substring of *200*. You can disallow substring matching by using the underscore (`_`) metacharacter to constrain matching to the specified pattern; for example, *_20_*. You can use output filtering on the display.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] regexp pathExpression [fields fieldOptions] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Displays information for only the route-target address family
- `regexp`—Indicates that multiple elements can be matched
- *pathExpression*—Regular expression string describing the AS paths to be matched. You do not have to enclose elements containing a space within quotation marks (“*one element*”).

Each element is either an AS number, a metacharacter, or a combination:

- ^ Matches the beginning of the path unless appearing as the first character within brackets; see below
 - [^] Matches any AS number except the ones specified within the brackets
 - \$ Matches the end of the path
 - { Matches the beginning of an AS_SET
 - } Matches the end of an AS_SET
 - (Matches the start of an AS_CONFED_SET or AS_CONFED_SEQ
 -) Matches the end of an AS_CONFED_SET or AS_CONFED_SEQ
 - .
- Matches any single character

- * Matches zero or more occurrences of the preceding character
- + Matches one or more occurrences of the preceding character
- ? Matches zero or one occurrence of the preceding character. To use the ? metacharacter in a regular expression, you must enter the following key sequence: Ctrl-v-?. Otherwise, the CLI considers this to be a request for assistance in completing the command, rather than understanding it as a metacharacter.

() Used with a multiplier metacharacter (*, +, ?) to specify patterns for multiple use. You can specify that a parenthesis be construed as a literal token instead of a metacharacter by immediately preceding it with a backslash:

\(matches the beginning of an AS_CONFED_SET or AS_CONFED_SEQ

\) matches the end of an AS_CONFED_SET or AS_CONFED_SEQ.

[] Matches any enclosed character; specifies a range of single characters

– Used within brackets to specify a range of AS numbers

_ Matches a ^, a \$, a comma, a space, a {, or a }. Placed on either side of a string to specify a literal and disallow substring matching. Numerals enclosed by underscores can be preceded or followed by any of the characters listed above.

| Matches characters on either side of the metacharacter; logical OR

- fields—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- *fieldOptions*—Fields to be displayed, in the format
all | [afi | aggregator | as-path | atomic-aggregate | best | clusters | communities | extended-communities | imported | intro | in-label | loc-pref | med | next-hop | next-hop-cost | origin | originator-id | out-label | peer | peer-type | rd | safi | stale | unknown-types | weight]*
- all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- afi—Address family identifier
- aggregator—AS number and IP address of aggregator
- as-path—AS path through which this route has been advertised
- atomic-aggregate—Whether the atomic aggregate attribute is present
- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported

- **intro**—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- **in-label**—MPLS label for the route; the label received with incoming MPLS frames; typically, but not always, this is the label advertised to MP-BGP peers
- **loc-pref**—Local preference for the route
- **med**—Multiexit discriminator for the route
- **next-hop**—IP address of the next router that is used when forwarding a packet to the destination network
- **next-hop-cost**—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- **origin**—Origin of the route
- **originator-id**—Router ID of the router in the local AS that originated the route
- **out-label**—MPLS label for the route; the label sent with outgoing MPLS frames; also the label received from MP-BGP peer; typically, but not always, this is the label received from MP-BGP peers
- **peer**—IP address of BGP peer from which route was learned
- **peer-type**—Type of BGP peer: internal, external, or confederation
- **rd**—Route distinguisher
- **safi**—Subsequent address family identifier
- **stale**—Route that has gone stale due to peer restart
- **unknown-types**—Attribute codes for unknown path attributes
- **weight**—Weight of the route
- *****—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- **filter**—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vplsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip bgp summary

Description Displays filtered information about the status of all BGP connections. Only those fields that you specify are displayed, except that the prefix field is always displayed. Default fields can be set with the **default-fields peer** command.

Syntax `show ip bgp [ipv4 unicast | ipv4 multicast | vpnv4 all | vpnv4 vrf vrfName | l2vpn all | l2vpn vpls vplsName | l2vpn vpws vpwsName | route-target signaling] summary [fields fieldOptions] [delta] [filter]`

- `ipv4 unicast`—Specifies the IPv4 unicast address family and routing table; the default option
- `ipv4 multicast`—Specifies the IPv4 multicast address family and routing table
- `vpnv4 all`—Specifies the IPv4 VPN address family and all IPv4 VPN routing and forwarding instances
- `vpnv4 vrf vrfName`—Specifies the IPv4 VPN address family and only the IPv4 VPN routing and forwarding instance with the name *vrfName*
- `l2vpn all`—Specifies all VPLS instances in the L2VPN address family
- `l2vpn vpls vplsName`—Specifies the VPLS instance with the name *vplsName*
- `l2vpn vpws vpwsName`—Specifies the L2VPN (VPWS) instance with the name *vpwsName*
- `route-target signaling`—Displays information for only the route-target address family
- `fields`—Displays only the specified fields; the display order of the fields is hard-coded and not affected by the order in which you enter them
- `fieldOptions`—Fields to be displayed, in the format `all | [dynamic | intro | last-reset-reason | messages-received | messages-sent | more-in-queue | peer-type | prefixes-received | remote-as | rib-version | send-queue-length | state | times-up | up-down-time | updates-received | updates-sent]*`
 - `dynamic` —Nature of peer, dynamic or not
 - `intro`—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
 - `last-reset-reason`—Reason for most recent reset
 - `messages-received`—Total number of messages received from the peer
 - `messages-sent`—Total number of messages sent to the peer
 - `more-in-queue`—Status indicating whether any messages are waiting to be sent to this peer
 - `peer-type`—Type of BGP peer: internal, external, or confederation
 - `prefixes-received`—Number of unique prefixes received from the peer
 - `remote-as`—Remote AS number of the peer
 - `rib-version`—Last RIB version queued to be sent to this peer
 - `send-queue-length`—Number of messages queued to be sent to this peer
 - `state`—State of the BGP session

- times-up—Number of times the session has been established
- up-down-time—How long the session has been up or down
- updates-received—Number of update messages received from the peer
- updates-sent—Number of update messages sent to the peer
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
l2vpn and **all** keywords added in JUNOS Release 7.1.0.
vpls keyword and *vpIsName* variable added in JUNOS Release 7.1.0.
vpws keyword and *vpwsName* variable added in JUNOS Release 8.1.0.
route-target signaling keywords added in JUNOS Release 8.2.0.

Related Topics

- Monitoring BGP-Related Settings for L2VPNs

show ip cache flow

Description Displays IP flow cache operational statistics.

Syntax show ip cache flow [history | active [brief | detail [*interfaceType interfaceNumber*]]]
 [*filter*]

- history—Displays a history (running total) of cache flows since the J-Flow statistics started or were last cleared
- active—Displays information for only active flows
- brief—Displays a summary rather than detailed information for active flows
- detail—Displays detailed information for active flows
- *interfaceType*—Interface type against which all flow records are filtered
- *interfaceNumber*—Interface number against which all flow records are filtered
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip cache flow aggregation

Description	Displays IP flow cache operational statistics for an aggregation cache.
Syntax	<pre>show ip cache flow aggregation <i>aggregationType</i> [history active [brief detail]] [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>aggregationType</i>—Displays information for an aggregation cache flow■ history—Displays a history (running total) of cache flows since the J-Flow statistics started or were last cleared■ active—Displays information for only active flows■ brief—Displays a summary rather than detailed information for active flows■ detail—Displays detailed information for active flows■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 8.1.0.

show ip community-list

Description	Displays community list information.
Syntax	<pre>show ip community-list [<i>listName</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>listName</i>—Name of a community list■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip demux interface

Description	Displays information about a subscriber interface.
Syntax	<pre>show ip demux interface <i>interfaceType</i> <i>interfaceSpecifier</i> [<i>filter</i>]</pre> <ul style="list-style-type: none">■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip dhcp-capture

Description Displays the per-interface DHCP packet capture configuration information.

Syntax show ip dhcp-capture [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.3.0.

Related Topics

- Monitoring Duplicate MAC Addresses Use By DHCP Local Server Clients

show ip dhcp-external binding

Description Displays binding for DHCP external clients.



NOTE: This command is deprecated and might be removed completely in a future release. The function provided by this command has been replaced by the **show dhcp binding** command.

Syntax show ip dhcp-external binding [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Bindings (Displaying IP Address-to-MAC Address Bindings)

show ip dhcp-external binding-id

Description Displays binding information for DHCP clients.



NOTE: This command is deprecated and might be removed completely in a future release. The function provided by this command has been replaced by the **show dhcp binding** command.

Syntax show ip dhcp-external binding-id [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Bindings (Displaying DHCP Bindings Based on Binding ID)

show ip dhcp-external configuration

Description Displays configuration information for the DHCP external server.

Syntax show ip dhcp-external configuration [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Local Server Configuration

show ip dhcp-external statistics

Description Displays statistics for the DHCP external server.

Syntax show ip dhcp-external statistics [*delta*] [*filter*]
■ *delta*—Displays baselined statistics
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP External Server Statistics

show ip dhcp-local

Description Displays DHCP local server configuration information, including the status of SNMP traps and client roaming support.

Syntax show ip dhcp-local

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

Related Topics

- Monitoring DHCP Local Server Configuration

show ip dhcp-local auth

Description Displays information about the DHCP local server authentication configuration.

Syntax `show ip dhcp-local auth { config | statistics [delta] } [filter]`

- `config`—Specifies that configuration information is shown
- `statistics`—Specifies that statistics are shown
- `delta`—Displays baselined statistics
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Local Server Authentication Information

show ip dhcp-local binding

Description Displays DHCP local server binding information for DHCP local server clients.



NOTE: This command is deprecated and might be removed completely in a future release. The function provided by this command has been replaced by the **show dhcp binding** command.

Syntax `show ip dhcp-local binding [ipAddress | interface interfaceType interfaceValue] [filter]`

- `ipAddress`—IP address of the subscriber's personal computer
- `interfaceType`—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- `interfaceSpecifier`—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Bindings (Local Server Binding Information)

show ip dhcp-local duplicate-clients

Description Displays information about all, or specific, MAC addresses being used by more than one DHCP local server client.

Syntax `show ip dhcp-local duplicate-clients [macAddress] [filter]`

- `macAddress`—Specific MAC address
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

Related Topics

- Monitoring Duplicate MAC Addresses Use By DHCP Local Server Clients

show ip dhcp-local excluded

Description Displays IP addresses that have been excluded. These are addresses that the DHCP local server does not allocate because they are already used by devices on the subnet.

Syntax show ip dhcp-local excluded [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring the Maximum Number of Available Leases

show ip dhcp-local leases

Description Displays DHCP local server lease and binding information.

Syntax show ip dhcp-local leases [*ipAddress*] [*filter*]

- *ipAddress*—Specific IP address
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring the Maximum Number of Available Leases

show ip dhcp-local limits

Description	Displays the maximum number of leases available for each VPI/VCI, VLAN, and Ethernet subnetwork, or for a particular interface or subinterface from the DHCP local server.
Syntax	<pre>show ip dhcp-local limits [interface <i>InterfaceType</i> <i>InterfaceSpecifier</i> <i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0. interface keyword and <i>interfaceType</i> and <i>interfaceSpecifier</i> variables added in JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring the Maximum Number of Available Leases

show ip dhcp-local pool

Description	Displays the configuration of DHCP local pools.
Syntax	<pre>show ip dhcp-local pool [groups] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>groups</i>—Displays DHCP local server pool group information ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring DHCP Local Address Pools

show ip dhcp-local reserved

Description	Displays the static IP address/MAC address pairs that the DHCP local server supplies in standalone mode. This command does not display address pairs that the DHCP local server supplies in non-PPP equal access mode.
Syntax	<pre>show ip dhcp-local reserved [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring Static IP Address and MAC Address Pairs Supplied by DHCP Local Server

show ip dhcp-local statistics

Description Displays statistics for the DHCP local server.

Syntax show ip dhcp-local statistics [interface [*interfaceType* *interfaceSpecifier*]]
[delta] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCP Local Server Statistics

show ip domain-lookup

Description Displays the name servers that you have specified on the router with the **ip name-server** command.

Syntax show ip domain-lookup [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip dvmrp

Description Displays DVMRP information for a virtual router.

Syntax show ip dvmrp [delta] [*filter*]

- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip dvmrp interface

Description	Displays DVMRP parameters for the specified interfaces.
Syntax	<pre>show ip dvmrp interface { { [brief] [<i>interfaceType</i> <i>interfaceSpecifier</i>] } summary } [delta] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>brief</i>—Specifies that a summary rather than detailed information is displayed ■ <i>delta</i>—Displays baselined statistics ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip dvmrp mroute

Description	Displays information about DVMRP routes to multicast groups.
Syntax	<pre>show ip dvmrp mroute [<i>group</i> [<i>sourceAddress</i> [<i>sourceMask</i>]]] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>group</i>—IP address of a specific multicast group ■ <i>sourceAddress</i>—IP address of the network on which the source resides ■ <i>sourceMask</i>—Subnet mask ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip dvmrp neighbor

Description	Displays information about DVMRP neighbors.
Syntax	<pre>show ip dvmrp neighbor [<i>interfaceType</i> <i>interfaceSpecifier</i> [<i>ipAddress</i>]] [brief] [delta] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>ipAddress</i>—IP address of the neighbor for which information is displayed ■ <i>brief</i>—Specifies that a summary rather than detailed information is displayed ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip dvmrp route

Description	Displays information about DVMRP routes.
Syntax	<pre>show ip dvmrp route [ipAddress [addressMask] interfaceType interfaceSpecifier] [brief] [filter]</pre> <ul style="list-style-type: none">■ <i>ipAddress</i>—IP address for which the best route is displayed■ <i>addressMask</i>—Subnet mask applied to IP address■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>brief</i>—Displays a summary rather than detailed information■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip dvmrp routeNextHop

Description	Displays information about the next hop.
Syntax	<pre>show ip dvmrp routeNextHop [ipAddress [addressMask [interfaceType interfaceSpecifier]]] [filter]</pre> <ul style="list-style-type: none">■ <i>ipAddress</i>—IP address of the network■ <i>addressMask</i>—Mask for the subnet■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip explicit-paths

Description Displays all explicit paths or a particular explicit path in a non-E-series implementation. See the **show mpls explicit-paths** command for a complete description and syntax.

show ip extcommunity-list

Description Displays all extended-community lists or a specific extended-community list.

Syntax show ip extcommunity-list [*listName*] [*filter*]

- *listName*—Name of the extended-community list
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip flow

Description Displays configuration values for either J-Flow sampling or export.

Syntax show ip flow { export | sampling }

- export—Displays export configuration settings
- sampling—Displays sampling configuration settings

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip forwarding-table slot

Description Displays information about routing table memory, load errors, and status for the forwarding table of a specific line module.

Syntax show ip forwarding-table slot *slotNumber*

- *slotNumber*—Number of the slot containing the line module

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip http

Description Displays information about HTTP local servers, information about the parameters configured for the HTTP local server, and statistics about the connections to the HTTP local server.

Syntax show ip http [scalar | server | statistics [delta]] [filter]

- scalar—Displays information about the connections to the HTTP local server
- server—Displays information about the parameters configured for the HTTP local server
- statistics—Display statistics about the connections to the HTTP local server
- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show ip igmp

Description Displays IGMP information for a virtual router.

Syntax show ip igmp [delta] [filter]

- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp groups

Description Displays information about statically joined and directly connected groups learned by means of IGMP.

Syntax `show ip igmp groups [count] [groupAddress]
[interfaceType interfaceSpecifier] [filter]`

- `count`—Displays the total number of groups learned
- `groupAddress`—IP address of the group
- `interfaceType`—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- `interfaceSpecifier`—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp interface

Description Displays IGMP information for interfaces on which you enabled IGMP.

Syntax `show ip igmp interface [brief | count] [delta]
[interfaceType interfaceSpecifier] [filter]`

- `brief`—Displays a summary of the information
- `count`—Displays the total number of interfaces on which you enabled IGMP
- `delta`—Displays baselined statistics
- `interfaceType`—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- `interfaceSpecifier`—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp mapped-oif

Description Displays the current mappings to all mapped outgoing interfaces or to the specified outgoing interface.

Syntax show ip igmp mapped-oif [*interfaceType interfaceSpecifier*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp membership

Description Displays IGMP membership information for multicast groups and (S, G) channels.

Syntax show ip igmp membership [*groupAddress*] [*tracked*]
[*interfaceType interfaceSpecifier*] [*filter*]

- *groupAddress*—Address of the group whose membership information you want to display
- *tracked*—Displays interface information only for interfaces where explicit host tracking is enabled
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.2.0.

show ip igmp oif-map

Description Displays all outgoing interface (OIF) maps or the OIF map for the specified interface.

Syntax show ip igmp oif-map [*mapName*] [*filter*]

- *mapName*—Outgoing interface multicast map name
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp oif-mapping

Description Displays the mapped OIF that would be assigned to a given map name, group address, and source address.

Syntax show ip igmp oif-mapping *mapName* [*groupAddress* [*sourceAddress*]] [*filter*]

- *mapName*—Outgoing interface multicast map name
- *groupAddress*—IP address of a multicast group
- *sourceAddress*—IP address of a multicast source
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp-proxy

Description Displays IGMP proxy parameters on a virtual router.

Syntax show ip igmp-proxy [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp-proxy groups

Description Displays information about multicast groups that IGMP proxy interfaces reported.

Syntax show ip igmp-proxy groups [*groupAddress* | count] [*filter*]

- *groupAddress*—IP address of a group for which you want to display information
- count—Displays the number of groups that IGMP proxy reported
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp-proxy interface

- Description** Displays information about the interface on which you configured IGMP proxy.
- Syntax** show ip igmp-proxy interface [*brief*] [*delta*] [*interfaceType interfaceSpecifier*] [*filter*]
- *brief*—Displays summarized information
 - *delta*—Displays baselined statistics
 - *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip igmp ssm-mapping

- Description** Displays the SSM mapping state and the source list mapping associated with a multicast group address.
- Syntax** show ip igmp ssm-mapping [*groupAddress*] [*filter*]
- *groupAddress*—IP address of the group
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip inspect

- Description** Displays the firewall inspection lists.
- Syntax** show ip inspect all [*delta*] [*filter*]
- *all*—Displays a concatenated list of inspection lists, **show ip inspect config** output, **show ip inspect name** output, **show ip inspect session** output, and **show ip inspect statistics** output
 - *delta*—Displays baselined statistics
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip inspect config

Description Displays all inspection parameters.

Syntax show ip inspect config [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip inspect name

Description Displays information about the specified inspection list.

Syntax show ip inspect name *listName* [*delta*] [*filter*]

- *listName*—Name of the inspection list for which you want to view rules
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip inspect session

Description Displays current sessions being tracked by the stateful firewall.

Syntax show ip inspect session [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip inspect statistics

Description Displays the firewall-related statistics.

Syntax show ip inspect statistics [*delta*] [*filter*]

- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip interface

Description Displays current state of all IP interfaces or the IP interfaces you specify. The default is all interface types and all interfaces.

Syntax `show ip interface [vrf vrfName]
{ { [brief | detail | other | show-virtual-router [virtualRouterName] }
[interfaceType interfaceSpecifier] } | summary } [delta] [filter]`

- *vrfName*—Name of the VRF
- *brief*—Displays a brief summary of IP status and configuration information
- *detail*—Shows a detailed display of IP status and configuration information
- *other*—Shows hidden interfaces and routes to the local address that are used internally so that from a given CE you can now ping the local address of any VRF that has a VPN overlapping a VPN to which the CE belongs
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *virtualRouterName*—Name of the virtual router
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *summary*—Shows a detailed summary of IP status and configuration
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
show-virtual-router keyword and *virtualRouterName* variable added in JUNOS Release 7.3.0.
other keyword added in JUNOS Release 8.0.0.

Related Topics

- Monitoring the QoS Configuration of IP Interfaces
- Monitoring the Policy Configuration of IP Interfaces
- Monitoring the Packet Mirroring Configuration of IP Interfaces

show ip interface shares

Description	Displays information about shared IP interfaces for all IP interfaces or for the IP interfaces you specify. The default is all interface types and all interfaces.
Syntax	<pre>show ip interface shares [vrf vrfName] [brief detail] [interfaceType interfaceSpecifier] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>brief</i>—Displays a brief summary of IP status and configuration information ■ <i>detail</i>—Shows a detailed display of IP status and configuration information ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip interface vrf

Description	Displays current state of all interfaces on the specified VRF.
Syntax	<pre>show ip interface vrf vrfName [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip local alias

Description	Displays information about the aliases for local address pools configured on your system.
Syntax	<pre>show ip local alias [aliasName] [filter]</pre> <ul style="list-style-type: none"> ■ <i>aliasName</i>—Name of a specific alias ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip local pool

Description Displays information about the local address pools configured on the router.

Syntax show ip local pool [*poolName* | statistics [delta]] [*filter*]

- *poolName*—Name of a specific local address pool
- statistics—Specifies that local pool statistics are to be shown
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip local shared-pool

Description Displays information about the shared local address pools configured on the router.

Syntax show ip local shared-pool [*poolName*] [*filter*]

- *poolName*—Name of a specific shared local address pool
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip mac-validate interface

Description Displays the status of MAC address validation on the physical interface that you specify.

Syntax show ip mac-validate interface *interfaceType interfaceSpecifier* [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip match-policy-list

Description Displays all the policy lists or the policy list that you specify. The default is all policy lists.

Syntax show ip match-policy-list [*listName*] [*filter*]

- *listName*—Name of a policy list
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip mirror interface

Description Displays information about the interface mirroring configuration of all interfaces, or for a specific interface on which mirroring is enabled.



NOTE: This command is deprecated and might be removed completely in a future release. The function provided by this command has been replaced by the **show secure policy-list** command.

Syntax show ip mirror interface [*vrf vrfName*] [*interfaceType interfaceSpecifier*]

- *vrfName*—Name of the VRF
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring the Packet Mirroring Configuration of IP Interfaces

show ip mobile binding

Description	Displays the contents of the binding table for the Mobile IP home agent in the current virtual router. By default, all mobility bindings are displayed.
Syntax	<pre>show ip mobile binding [nai { user@realm @realm @ } ipAddress summary] [filter]</pre> <ul style="list-style-type: none">■ <i>user@realm</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>user@realm</i>, where <i>realm</i> is the domain name■ <i>@realm</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>@realm</i>, where <i>realm</i> is the domain name■ <i>@</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>@</i>■ <i>ipAddress</i>—IP address of the home agent■ <i>summary</i>—Displays aggregate information about the binding table■ <i>filter</i>—See <i>Filtering show Commands in About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show ip mobile home-agent

Description	Displays configuration information for the Mobile IP home agent in the current virtual router. This information includes access list name, registration lifetime, replay protection time, and reverse tunnel setting.
Syntax	<pre>show ip mobile home-agent</pre>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show ip mobile host

Description	Displays configuration information for all or specified mobile nodes or domain users.
Syntax	<pre>show ip mobile host [nai { user@realm @realm @ } ipAddress] [filter]</pre> <ul style="list-style-type: none"> ■ <i>user@realm</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>user@realm</i>, where <i>realm</i> is the domain name ■ <i>@realm</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>@realm</i>, where <i>realm</i> is the domain name ■ <i>@</i>—Name of the user for the mobile node specification when the nai keyword is specified, in the format <i>@</i> ■ <i>ipAddress</i>—IP address of the home agent ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show ip mobile profile

Description	Displays the name of the interface profile associated with the Mobile IP home agent in the current virtual router.
Syntax	<pre>show ip mobile profile</pre>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show ip mobile secure foreign-agent

Description	Displays the security associations configured for all Mobile IP foreign agents in the current virtual router.
Syntax	<pre>show ip mobile secure foreign-agent [ipAddress] [filter]</pre> <ul style="list-style-type: none"> ■ <i>ipAddress</i>—IP address of the foreign agent ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show ip mobile secure host

Description Displays the security associations configured for all mobile nodes or domains in the current virtual router.

Syntax show ip mobile secure host [nai { *user@realm* | *@realm* | *@* } | *ipAddress*] [*filter*]

- *user@realm*—Name of the user for the mobile node specification when the **nai** keyword is specified, in the format *user@realm*, where *realm* is the domain name
- *@realm*—Name of the user for the mobile node specification when the **nai** keyword is specified, in the format *@realm*, where *realm* is the domain name
- *@*—Name of the user for the mobile node specification when the **nai** keyword is specified, in the format *@*
- *ipAddress*—IP address of the foreign agent
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 9.0.0.

show ip mobile traffic

Description Displays protocol statistics for the Mobile IP home agent traffic, including advertisements, solicitations, registrations, registration errors, and security violations.

Syntax show ip mobile traffic [delta]

- *delta*—Displays baselined statistics

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 9.0.0.

show ip mroute

Description Displays information about all or specified multicast routes.

Syntax `show ip mroute [groupIpAddress [sourceIpAddress]]`
`[summary | count | statistics] [active [bandwidth]] [filter]`

- *groupIpAddress*—IP address of a multicast group
- *sourceIpAddress*—IP address of a multicast source
- *summary*—Displays brief information about the multicast routes
- *count*—Displays the number of groups and sources
- *statistics*—Displays statistics for packets received through multicast routes that the router has added to the multicast routing table and established on the appropriate line modules
- *active*—Displays active mroutes
- *bandwidth*—Admission bandwidth for active multicast routes that is greater than the specified bandwidth threshold; default is 4000 bps
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
active keyword added in JUNOS Release 8.1.0.

show ip multicast protocols

Description Displays information about the multicast protocols enabled on the router.

Syntax `show ip multicast protocols [brief] [filter]`

- *brief*—Displays a summary rather than detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip multicast routing

Description Displays information about the status of multicast routing on the router.

Syntax `show ip multicast routing`

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip nat inside rule

Description Displays NAT inside rule information.

Syntax show ip nat inside rule [*accessListName*] [*filter*]

- *accessListName*—Name of the access list
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip nat outside rule

Description Displays NAT outside rule information.

Syntax show ip nat outside rule [*accessListName*] [*filter*]

- *accessListName*—Name of the access list
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip nat pool

Description Displays NAT address pool information.

Syntax show ip nat pool [*poolName*] [*filter*]

- *poolName*—Name of the pool
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip nat statistics

Description Displays internal NAT statistics.

Syntax show ip nat statistics [global [pool] | pool [*poolName*]] [*filter*]

- global—Displays system-wide statistics
- pool—Displays address pool statistics
- *poolName*—Name of the pool
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip nat translations

Description Displays translations that reside in the NAT translation table.

Syntax show ip nat translations [static | dynamic] [gre | icmp | tcp | udp]* [verbose]
[filter]

show ip nat translations inside *insideLocalIpAddress* [*localPort*]
[*insideGlobalIpAddress* [*globalPort*]] [verbose] [filter]

show ip nat translations outside *outsideGlobalIpAddress* [*globalPort*]
[*outsideLocalIpAddress* [*localPort*]] [verbose] [filter]

- static—Displays static translations
- dynamic—Displays dynamic translations
- tcp—Displays TCP port translations
- udp—Displays UDP port translations
- icmp—Displays ICMP port translations
- gre—Displays GRE translations
- *—Indicates that you can specify one or more protocol keywords, in any order, in a list in the command line
- inside—Specifies an inside address
- *insideLocalIpAddress*—Inside local IP address
- *localPort*—Local port value
- *insideGlobalIpAddress*—Inside global IP address
- *globalPort*—Global port value
- outside—Specifies an outside address
- *outsideGlobalIpAddress*—Inside global IP address
- *outsideLocalIpAddress*—Inside local IP address
- verbose—Additionally displays the time since creation and time since last use for each translation entry
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0
gre keyword added in JUNOS Release 7.3.0.

show ip nfs

Description Displays information about the interface that the current virtual router uses to exchange messages with the NFS server.

Syntax show ip nfs [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf

Description Displays general information about OSPF routing processes.

Syntax show ip ospf [vrf *vrfName*] [delta] [*filter*]

- *vrfName*—Name of the VRF
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf border-routers

Description Displays routing table entries for area border and AS boundary routers.

Syntax show ip ospf border-routers [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf database

Description Displays the full IP OSPF database, a summary of the database, the number of LSAs available in each category, or the number of LSAs that have reached the maximum age in each category.

Syntax `show ip ospf database [vrf vrfName] [database-summary | area areaId | areaIdInt | { asbr-summary | external | network | nssa-external | router | summary | opaque-area | link-local } [ipAddress | internal]] [filter]`

- *vrfName*—Name of the VRF
- database-summary—Displays summary of the database
- *areaId*—Area ID as an IP address
- *areaIdInt*—Area ID as an integer
- asbr-summary—Displays AS boundary router summary link states
- external—Displays External link states
- network—Displays network link states
- nssa-external—Displays NSSA external link states
- router—Displays router link states
- summary—Displays network summary link states
- opaque-area—Displays traffic-engineering opaque LSA states
- link-local—Displays link local link states
- *ipAddress*—Link-state IP address
- internal—Displays internal LSA information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
areaId and *areaIdInt* variables added in JUNOS Release 7.3.0.

show ip ospf interface

Description Displays a list of OSPFv2 interfaces.

Syntax show ip ospf interface [vrf *vrfName*] [*interfaceType interfaceSpecifier*] [*filter*]

- *vrfName*—Name of the VRF
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf internal-statistics

Description Displays internal OSPFv2 statistics.

Syntax show ip ospf internal-statistics [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf neighbors

Description Displays a list of OSPF neighbors.

Syntax show ip ospf neighbors [vrf *vrfName*] [history] [*neighborAddress*] [*interfaceType interfaceSpecifier*] [*filter*]

- *vrfName*—Name of the VRF
- history—Displays history of events for the listed neighbors
- *neighborAddress*—Router ID of a specified neighbor
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
history keyword added in JUNOS Release 7.3.0.

show ip ospf remote-neighbor interface

Description Displays interfaces associated with OSPF remote neighbors.

Syntax show ip ospf remote-neighbor [*ipAddress*] interface [vrf *vrfName*] [*filter*]

- *ipAddress*—Source IP address of a remote neighbor
- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf spf-log

Description Displays how often and why the router has run a full SPF calculation.

Syntax show ip ospf spf-log [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ospf virtual-links

Description Displays the parameters and the current state of OSPF virtual links. A virtual link is a logical connection between two routers. To establish or maintain connectivity to the backbone, you can configure virtual links through nonbackbone areas. Virtual links serve to connect physically separate components of the backbone—the two endpoints of a virtual link area.

Syntax show ip ospf virtual-links [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim

Description	Displays general PIM router-level information.
Syntax	show ip pim
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip pim auto-rp

Description	Displays information about rendezvous point routers and the RP mapping agent in a PIM sparse mode environment.
Syntax	show ip pim auto-rp [<i>filter</i>] <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip pim bsr

Description	Displays BSR information and the group prefixes for which the local router is a C-RP in a PIM sparse mode environment.
Syntax	show ip pim bsr [<i>filter</i>] <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip pim data-mdt

Description	Displays the configuration and status of a data MDT. There is no no version.
Syntax	show ip pim data-mdt [senders receivers] [group <i>groupIPAddress</i>] [source <i>sourceIPAddress</i>] [summary count] <ul style="list-style-type: none"> ■ senders—Displays data MDTs on which the provider edge transmits data ■ receivers—Displays data MDTs on which the provider edge receives data ■ <i>groupIPAddress</i>—IP address of the group ■ <i>sourceIPAddress</i>—IP address of the source ■ summary—Displays a summary of configuration for each data MDT ■ count—Displays the number of data MDTs
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 8.2.0.

show ip pim dense-mode sg-state

Description Displays information for each SG entry that PIM dense mode knows about.

Syntax show ip pim dense-mode sg-state
[group *groupAddress* [source *sourceAddress*]] [*filter*]

- *groupAddress*—IP address of a multicast group
- *sourceAddress*—IP address of a multicast source
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim interface

Description Displays information about each PIM dense mode interface.

Syntax show ip pim interface { summary | [*interfaceType interfaceSpecifier*] [count] [*filter*] }

- *summary*—Displays the number of configured, enabled, and disabled PIM dense mode, PIM sparse mode, and PIM sparse-dense mode interfaces
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *count*—Displays the number of incoming and outgoing PIM control packets
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim neighbor

Description Displays information about each PIM neighbor that the router has discovered.

Syntax show ip pim neighbor [*interfaceType interfaceSpecifier*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim remote-neighbor

Description Displays information about all PIM remote neighbors or the specified remote neighbor.



NOTE: This command is typically used when you configure PIM remote neighbors to run multicast services over BGP/MPLS VPNs. That functionality is no longer supported.

Syntax show ip pim remote-neighbor [*ipAddress*] [*count*] [*filter*]

- *ipAddress*—IP address of a remote neighbor
- *count*—Display the number of remote neighbors
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim rp

Description Displays information about PIM group-to-RP mappings.

Syntax show ip pim rp { *groupAddress* | *mapping* } [*filter*]

- *groupAddress*—Address of a group for which you want to view group-to-RP mappings
- *mapping*—Displays all group-to-RP mappings that the router has recorded
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim rp-hash

Description Shows which RP a multicast group is using.

Syntax show ip pim rp-hash *groupAddress* [*filter*]

- *groupAddress*—IP address of multicast group for which you want to view the RP
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim sparse-mode sg-state

Description Displays information for each SG entry that PIM sparse mode knows about.

Syntax `show ip pim sparse-mode sg-state [group groupAddress
[source sourceAddress] | rp rpAddress] [count] [filter]`

- *groupAddress*—IP address of a multicast group
- *sourceAddress*—IP address of a multicast source
- *rpAddress*—IP address of an RP router
- *count*—Displays the number of SG entries
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim sparse-mode unicast-route

Description Displays the unicast routes that PIM sparse mode is using.

Syntax `show ip pim sparse-mode unicast-route [routeAddress routeMask] [count] [filter]`

- *routeAddress*—IP address associated with a unicast route
- *routeMask*—Network mask associated with a unicast route
- *count*—Shows the number of unicast routes that PIM sparse mode is using.
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip pim spt-threshold

Description Displays the threshold for switching to the shortest-path-tree at a PIM designated router.

Syntax `show ip pim spt-threshold [filter]`

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip prefix-list

Description Displays information about prefix lists.

Syntax show ip prefix-list [*listName* [seq *seqNum* | *ipPrefix* [longer | first-match]]] [*filter*]

To display summary or detail info:

show ip prefix-list { summary | detail } [*listName*] [*filter*]

- *listName*—Prefix list for which information is displayed
- *seqNum*—Sequence number of prefix list entry for which information is displayed
- *ipPrefix*—Prefix in the format *IPbaseaddress/length*; for example, 10.10.10.0/24
- longer—Displays all entries for a prefix that are equal to or more specific than the specified prefix
- first-match—Displays only an entry that matches the specified prefix
- *filter*—See *Filtering show Commands* in *About This Guide*
- summary—Displays summary information
- detail—Displays detailed information

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip prefix-tree

Description Displays information about prefix trees.

Syntax show ip prefix-tree [*treeName* [*ipPrefix* [longer]]] [*filter*]

To display summary or detail info:

show ip prefix-tree { summary | detail } [*treeName*] [*filter*]

- *treeName*—Name of the prefix tree
- *ipPrefix*—Prefix in the format *IPbaseaddress/length*; for example, 10.10.10.0/24
- longer—Displays all entries for a prefix that are equal to or more specific than the specified prefix
- *filter*—See *Filtering show Commands* in *About This Guide*
- summary—Displays summary information
- detail—Displays detailed information

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip profile

Description Displays information about a specific IP profile.

Syntax show ip profile *profileName* [*filter*]

- *profileName*—Name of the profile you want to display
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip protocols

Description Displays detailed information about IP protocols currently configured on the router.

Syntax show ip protocols [*vrf vrfName*] [*summary*] [*filter*]

- *vrfName*—Displays information about protocols only for the specified VRF
- *summary*—Displays only a list of currently configured protocols
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip redistribute

Description Displays configured route redistribution policy.

Syntax show ip redistribute [*vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip rip

Description	Displays limited RIP general status information.
Syntax	<pre>show ip rip [vrf vrfName] [brief] [ifconfig] [ipAddress] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>brief</i>—Displays limited information ■ <i>ifconfig</i>—Displays address and interface configuration information instead of the default operational data ■ <i>ipAddress</i>—Displays information only for specific RIP network ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip rip database

Description	Displays route entries in the RIP routing table (RIP database).
Syntax	<pre>show ip rip database [vrf vrfName] [all] [inactive] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>all</i>—Displays active and inactive routes learned through RIP updates ■ <i>inactive</i>—Displays routes the router will discard in the immediate future ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip rip network

Description	Displays the networks associated with the RIP routing process.
Syntax	<pre>show ip rip network [vrf vrfName] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip rip peer

Description Displays all RIP neighbors, with limited information about each peer.

Syntax show ip rip peer [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip rip statistics

Description Displays global statistics associated with the RIP routing process. If you specify an IP address, additionally displays statistics for that interface.

Syntax show ip rip statistics [vrf *vrfName*] [*ipAddress*] [*delta*] [*filter*]

- *vrfName*—Name of the VRF
- *ipAddress*—Address of IP interface where RIP is running; identifies RIP network
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip rip summary-address

Description Displays RIP summary addresses.

Syntax show ip rip summary-address [vrf *vrfName*] [*ipAddress* [*ipMask*]] [*filter*]

- *vrfName*—Name of the VRF
- *ipAddress*—Address of IP interface where RIP is running
- *ipMask*—IP mask of the specific address
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip route

Description Displays current state of the routing table.

Syntax `show ip route [vrf vrfName] [destination [ipMask] [detail]] [all] [protocol] [filter]`

To display summary information:

`show ip route summary [vrf vrfName] [filter]`

- *vrfName*—Displays the contents of the IP routing table associated with a VRF
- *destination*—Specifies the IP address or domain name of the host to show
- *ipMask*—IP mask of the specific address to show
- *detail*—Displays detailed information about the specific prefix; currently shows the tag added by means of the **ip route** command
- *all*—Displays all routes in the routing table inserted from all protocols (not just the *best* routes that are used for forwarding)
- *protocol*—One of the following protocols for which you want to display the best routes in the routing table; no routes are displayed if routes for the specified protocol are not present in the routing table
 - *access*—Displays the best access-server routes (BGP) in the routing table
 - *access-internal*—Displays the best access-internal routes in the routing table
 - *bgp*—Displays the best BGP routes in the routing table
 - *bgp-tunnel*—Displays the best BGP tunnel routes in the routing table
 - *dvmrp*—Displays the best DVMRP routes in the routing table
 - *isis*—Displays the best IS-IS routes in the routing table
 - *ldp*—Displays the best LDP tunnel routes in the routing table
 - *local*—Displays the best locally connected routes in the routing table
 - *mbgp*—Displays the best MBGP routes in the routing table
 - *ospf*—Displays the best OSPF routes owned by in the routing table
 - *other*—Displays the best internal control routes in the routing table
 - *rip*—Displays the best RIP routes in the routing table
 - *rsvp*—Displays the best RSVP tunnel routes in the routing table
 - *static*—Displays the best static routes added by network management to the routing table
 - *static-rpf*—Displays the best static RPF routes added by network management to the routing table
- *summary*—Displays summary counters for all routes in the IP routing table
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip route slot

Description Displays the interface and next hop for an IP address in the routing table of a line module.

Syntax show ip route slot *slotNumber* [vrf *vrfName*] *ipAddress*

- *slotNumber*—Number of slot containing the line module
- *vrfName*—Name of the VRF
- *ipAddress*—IP address to look up in the routing table

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip rpf-route

Description	Displays routes that the router can use to verify source addresses in multicast packets.
Syntax	<pre>show ip rpf-route [vrf vrfName] [destination [ipMask] [detail]] [all] [protocol] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Displays the contents of the IP routing table associated with a VRF ■ <i>destination</i>—Specifies the IP address or domain name of the host to show ■ <i>ipMask</i>—IP mask of the specific address to show ■ <i>detail</i>—Displays detailed information about the specific prefix; currently shows the tag added by means of the ip route command ■ <i>all</i>—Displays all routes in the routing table inserted from all protocols (not just the <i>best</i> routes that are used for forwarding) ■ <i>protocol</i>—One of the following protocols for which you want to display the best routes in the routing table; no routes are displayed if routes for the specified protocol are not present in the routing table <ul style="list-style-type: none"> ■ <i>access</i>—Displays the best access-server routes (BGP) in the routing table ■ <i>access-internal</i>—Displays the best access-internal routes in the routing table ■ <i>bgp</i>—Displays the best BGP routes in the routing table ■ <i>bgp-tunnel</i>—Displays the best BGP tunnel routes in the routing table ■ <i>dvmrp</i>—Displays the best DVMRP routes in the routing table ■ <i>isis</i>—Displays the best IS-IS routes in the routing table ■ <i>ldp</i>—Displays the best LDP tunnel routes in the routing table ■ <i>local</i>—Displays the best locally connected routes in the routing table ■ <i>mbgp</i>—Displays the best MBGP routes in the routing table ■ <i>ospf</i>—Displays the best OSPF routes owned by in the routing table ■ <i>other</i>—Displays the best internal control routes in the routing table ■ <i>rip</i>—Displays the best RIP routes in the routing table ■ <i>rsvp</i>—Displays the best RSVP tunnel routes in the routing table ■ <i>static</i>—Displays the best static routes added by network management to the routing table ■ <i>static-rpf</i>—Displays the best static RPF routes added by network management to the routing table ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ip service-profile

Description Displays information for IP service profiles.

Syntax show ip service-profile [*profileName*]

- *profileName*—Name of a specific service profile

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip socket statistics

Description Displays BSD socket-emulation statistics.

Syntax show ip socket statistics [*detailed*] [*filter*]

- *detailed*—Displays detailed statistics for each TCP socket
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip ssh

Description Displays the current state of the SSH server.

Syntax show ip ssh [*detail*] [*filter*]

- *detail*—Displays detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip static

Description Displays general status information for static routes added by network management to the routing table.

Syntax `show ip static [vrfName] [ipAddress ipMask [all]] [filter]`

- *vrfName*—Name of the VRF
- *ipAddress*—IP address to show
- *ipMask*—IP mask of the specific address to show
- *all*—Displays all routes starting at the specified prefix
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip-subscriber

Description Displays information about the active IP subscribers that are created by subscriber manager.

Syntax `show ip-subscriber [subscriberId | interface interfaceType interfaceSpecifier | username userName | virtual-router vrName | summary] [detail] [filter]`

- *subscriberId*—ID of the IP subscriber
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *userName*—Username of a specific active subscriber
- *vrName*—Name of the virtual router to which interfaces of active IP subscribers are bound
- *summary*—Displays the number of IP subscribers for each virtual router
- *detail*—Displays detailed information about IP subscribers
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.1.0.
filter variable added in JUNOS Release 9.1.0.

show ip traffic

Description Displays statistics about IP traffic.

Syntax show ip traffic [*vrfName*] [delta] [*filter*]

- *vrfName*—Name of the VRF
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip tunnel reassembly statistics

Description Displays statistics on the reassembly of fragmented tunnel packets within the current virtual router context.

Syntax show ip tunnel reassembly statistics [detail] [all] [delta] [*filter*]

- detail—Displays detailed reassembly statistics that include packets reassembled or discarded per protocol
- all—Displays reassembly statistics for all virtual routers on the router
- delta—Displays baselined reassembly statistics
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
delta keyword added in JUNOS Release 8.0.0.

show ip tunnel-route

Description Displays current state of the IPv4 tunnel routing table.

Syntax `show ip tunnel-route [vrf vrfName] [destination [ipMask] [detail]] [all] [protocol] [filter]`

- *vrfName*—Contents of the IPv4 tunnel routing table associated with a VRF
- *destination*—IP address or domain name of the host to show
- *ipMask*—IP mask of the specific address to show
- *detail*—Displays detailed information about the specific prefix
- *all*—Displays all routes in the IPv4 tunnel routing table inserted from all protocols, not just the best routes
- *protocol*—One of the following protocols for which you want to display the best route or all routes in the tunnel routing table; no routes are displayed if routes for the specified protocol are not present in the tunnel routing table



NOTE: Other protocol options are available in the CLI, but they are not applicable to the tunnel routing table.

- *bgp-tunnel*—Displays the BGP tunnel routes in the tunnel routing table
- *ldp*—Displays the LDP tunnel routes in the tunnel routing table
- *rsvp*—Displays the RSVP tunnel routes in the tunnel routing table
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ip udp statistics

Description Displays UDP statistics.

Syntax `show ip udp statistics [vrfName] [delta] [filter]`

- *vrfName*—Name of the VRF
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip vrf

Description Displays information for a specified VRF and its associated interfaces or all VRFs and their associated interfaces for the current virtual router context.

Syntax `show ip vrf [[detail] [vrfName] | interfaces [detail]] [filter]`

- `detail`—Displays detailed VRF information
- `vrfName`—Name of the VRF for which information is displayed
- `interfaces`—Displays all VRFs in the virtual router and their associated interfaces
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip vrrp

Description Displays information for the VRID configured on the specified interface, all VRIDs configured on the specified interface, or summary information.

Syntax `show ip vrrp [brief] [interface interfaceType interfaceSpecifier [vrid]] [filter]`

To display summary information:
`show ip vrrp summary [filter]`

- `brief`—Displays a brief summary of VRIDs
- `interfaceType`—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- `interfaceSpecifier`—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- `vrid`—Virtual router ID
- `filter`—See *Filtering show Commands* in *About This Guide*
- `summary`—Displays a summary count on all configured VRIDs

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip vrrp neighbor

Description Displays summary of all neighbors known to the VRRP router configured on the specified interface. A neighbor—a router that shares a given VRID with the VRRP router—is known to the VRRP router only when the neighbor becomes a master for an IP address and sends VRRP advertisements to that effect. If a router sharing the VRID has not yet become a master, then the local router remains unaware of this neighbor and this command does not display that neighbor.

Syntax `show ip vrrp neighbor [interface interfaceType interfaceSpecifier [vrid]] [filter]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *vrid*—Virtual router ID
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip vrrp statistics

Description Displays global statistics, interface statistics, or statistics per interface and VRID.

Syntax `show ip vrrp statistics [global | [interface interfaceType interfaceSpecifier [vrid]] [delta] [filter]`

- *global*—Displays global counters
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *vrid*—Virtual router ID
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ip vrrp tracked-objects

Description Displays VRRP tracked objects.

Syntax `show ip vrrp tracked-objects [filter]`

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show ipsec ca identity

Description Displays information for a specific IKE CA identity or for all IKE CA identities that are configured on the E-series router and that support the online digital certificate process.

Syntax show ipsec ca identity { *name* | all } [*filter*]

- *name*—Name of specific CA
- all—Displays information for all CAs
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec certificates

Description Displays the IKE certificates configured on the E-series router.



NOTE: This command is replacing the **show ike certificates** command. The **show ike certificates** command may be removed completely in a future release.

Syntax show ipsec certificates { all | *crl* | *peer* | *public-certs* | *root-cas* } [*hex-format*] [*filter*]

- all—Displays all certificates configured on the router
- *crl*—Displays certificate revocation lists
- *peer*—Displays peer certificates
- *public-certs*—Displays public certificates
- *root-cas*—Displays root CA certificates
- *hex-format*—Displays certificate data in hexadecimal format
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec identity

Description Displays the IKE identity configuration.



NOTE: This command is replacing the **show ike identity** command. The **show ike identity** command may be removed completely in a future release.

Syntax show ipsec identity [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec ike-configuration

Description Displays a summary of the IKE configuration.



NOTE: This command is replacing the **show ike configuration** command. The **show ike configuration** command may be removed completely in a future release.

Syntax show ipsec ike-configuration [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec ike-policy-rule

Description Displays configuration of IKE phase 1 policy rules.



NOTE: This command is replacing the **show ike policy-rule** command. The **show ike policy-rule** command may be removed completely in a future release.

Syntax show ipsec ike-policy-rule [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec ike-sa

Description Displays IKE phase 1 SAs running on the router.



NOTE: This command is replacing the **show ike sa** command. The **show ike sa** command may be removed completely in a future release.

Syntax show ipsec ike-sa [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec key mypubkey rsa

Description Displays the ISAKMP/IKE public key configured on the router. The public key is generated as part of a public/private key pair used to perform RSA authentication for IKE SA negotiations.

Syntax show ipsec key mypubkey rsa [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ipsec key pubkey-chain rsa

Description Displays the ISAKMP/IKE public key that a remote peer uses for RSA authentication without the need for a digital certificate.

Syntax show ipsec key pubkey-chain rsa { *summary* | address *ipAddress* | name *identityString* } [*filter*]

- *summary*—Displays a brief summary of the remote peers for which peer public keys are configured on the router
- *ipAddress*—IP address of the peer for which the public key can be used, in 32-bit dotted decimal format (for example, 192.168.32.2)
- *identityString*—Identity of the remote peer for which the public key can be used, either in fully qualified domain name (FQDN) format (for example, group003.customer535.isp.net) or in FQDN format preceded by an optional *user@* specification (for example, tsmith@group003.customer535.isp.net); maximum of 80 characters
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ipsec lifetime

Description Displays the configured default lifetime of phase II SAs.

Syntax show ipsec lifetime

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec local-endpoint

Description Displays the address and transport virtual router of local endpoints.

Syntax show ipsec local-endpoint [transport-virtual-router *transportVirtualRouter*]

- *transportVirtualRouter*—Name of virtual router that includes source or destination addresses or both assigned to tunnel interfaces

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec option

Description Displays the dead peer detection (DPD), Network Address Translation Traversal (NAT-T) status (enabled or disabled), and invalid cookie transmission status (enabled or disabled) for the current virtual router.

Syntax show ipsec option

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec transform-set

Description Displays transform sets configured on the router.

Syntax show ipsec transform-set [*transformSetName*]

- *transformSetName*—Name of a transform set

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec transport interface

Description Displays all details, including statistics, of IPSec transport connections that match the specified criteria.

Syntax show ipsec transport interface [detail] [application *applicationType*]
[state { up | down }] [*interfaceName* |
[virtual-router *vrName*] destination *destAddress* | local *localAddress*] [*filter*]

To display summary information:
show ipsec transport interface summary

- detail—Includes statistics for the displayed connection
- *applicationType*—Application protected by IPSec transport connections
- state—Displays connections that are in the specified state, up or down
- *interfaceName*—Connection number that you want to display
- *vrName*—Name of a virtual router. If you do not specify a virtual router, the router displays connections on the current virtual router context. Notice that the local and destination IP addresses exist in the current virtual router context.
- *destAddress*—IP address of remote endpoint
- *localAddress*—IP address of local endpoint
- *filter*—See *Filtering show Commands* in *About This Guide*
- summary—Displays a summary of all IPSec transport connections

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec transport profile

Description Displays the configuration of an IPSec transport profile.

Syntax show ipsec transport profile [*profileName*]

- *profileName*—Name of the profile that you want to display

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec tunnel

Description Displays information about tunnels that are configured on a specific virtual router.

Syntax `show ipsec tunnel [tunnelName | [virtual-router vrName] ip ipAddress]`
`[state { adminState | operStatus }] [filter] [detail] [delta]`

To display summary information:

`show ipsec tunnel summary [filter]`

- *tunnelName*—Name of tunnel
- *vrName*—Name of virtual router on which tunnels are configured
- *ipAddress*—IP address used by tunnels
- *state*—Restricts display to tunnels in one of the following states:
 - *adminState*—Administrative state of enabled or disabled
 - *operStatus*—Operational state of up, down, lower-down, or not-present
- *filter*—See *Filtering show Commands* in *About This Guide*
- *detail*—Displays configuration and statistics of tunnels
- *delta*—Displays baselined statistics
- *summary*—Displays a summary of all tunnels configured on the router

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipsec tunnel profile

Description Displays information about all existing IPSec tunnel profiles or the specified tunnel profile.

Syntax `show ipsec tunnel profile [detail] [profileName] [filter]`

- *detail*—Displays detailed information about the profile
- *profileName*—Name of a specific IPSec tunnel configuration profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.3.0.

show ipv6

Description Displays general information for IPv6.

Syntax `show ipv6 [vrf vrfName]`

- *vrfName*—Name of the VRF

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 access-list

Description Displays access list information about the specified IPv6 access list.

Syntax show ipv6 access-list [*accessListName*] [*detail*] [*filter*]

- *accessListName*—Name of the access list
- *detail*—Displays detailed information about the access list
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 address

Description Displays interface information for the specified IPv6 address.

Syntax show ipv6 address [*vrf vrfName*] [*brief* | *detail*] *localAddress*

- *vrfName*—Name of the VRF
- *brief*—Displays summary information about the interface
- *detail*—Displays detailed information about the interface
- *localAddress*—IPv6 address of the specific interface

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 dhcpv6-local binding

Description Displays the mapping between the token or enduring IPv6 prefix and the DHCP unique ID (DUID) of the client computer.

Syntax show ipv6 dhcpv6-local binding [*ipv6Prefix*] [*filter*]

- *ipv6Prefix*—IPv6 address of the subscriber's personal computer
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCPv6 Local Server Binding Information

show ipv6 dhcpv6-local dns-domain-searchlist

Description Displays the DHCPv6 local server's DNS search list.

Syntax show ipv6 dhcpv6-local dns-domain-searchlist [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCPv6 Local Server DNS Search Lists

show ipv6 dhcpv6-local dns-servers

Description Displays DNS servers that are configured on the DHCPv6 local server.

Syntax show ipv6 dhcpv6-local dns-servers [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCPv6 Local Server DNS Servers

show ipv6 dhcpv6-local prefix-lifetime

Description Displays the DHCPv6 default prefix lifetime.

Syntax show ipv6 dhcpv6-local prefix-lifetime [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCPv6 Local Server Prefix Lifetime

show ipv6 dhcpv6-local statistics

Description Displays statistics for the DHCPv6 local server.

Syntax show ipv6 dhcpv6-local statistics [*delta*] [*filter*]

- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring DHCPv6 Local Server Statistics

show ipv6 forwarding-table slot

Description Displays information about routing table memory, load errors, and status for the IPv6 forwarding table of a specific line module.

Syntax show ipv6 forwarding-table slot *slotNumber*

- *slotNumber*—Number of the slot containing the line module

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ipv6 interface

Description Displays current state of all IPv6 interfaces or the IPv6 interfaces that you specify. The default is all interface types and all interfaces.

Syntax show ipv6 interface [*vrf vrfName*] [*brief* | *detail*] [*interfaceType interfaceSpecifier*] [*delta*] [*filter*]

To display summary information:

show ipv6 interface summary [*vrf vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *brief*—Displays a brief summary of IPv6 status and configuration information
- *detail*—Shows a detailed display of IP status and configuration information
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*
- *summary*—Shows a detailed summary of IP status and configuration

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

Related Topics

- Monitoring the Policy Configuration of IPv6 Interfaces

show ipv6 mld

Description Displays MLD information for a virtual router.

Syntax show ipv6 mld [delta] [filter]

- delta—Displays baselined statistics
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld groups

Description Displays information about statically joined and directly connected groups learned through MLD.

Syntax show ipv6 mld groups [count] [groupAddress]
[interfaceType interfaceSpecifier] [filter]

- count—Displays the total number of groups learned
- groupAddress—IPv6 address of the group
- interfaceType—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- interfaceSpecifier—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld membership

Description Displays MLD membership information for multicast groups and (S, G) channels.

Syntax show ipv6 mld membership [groupAddress] [tracked]
[interfaceType interfaceSpecifier] [filter]

- groupAddress—Address of the group whose membership information you want to display
- tracked—Displays interface information only for interfaces where explicit host tracking is enabled
- interfaceSpecifier—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.2.0.

show ipv6 mld interface

Description	Displays MLD information for interfaces on which you enabled MLD.
Syntax	<pre>show ipv6 mld interface [brief count] [delta] [interfaceType interfaceSpecifier] [filter]</pre> <ul style="list-style-type: none">■ brief—Displays a summary of the information■ count—Displays the total number of interfaces on which you enabled MLD■ delta—Displays baselined statistics■ interfaceType—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ interfaceSpecifier—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 mld mapped-oif

Description	Displays the current mappings to all mapped outgoing interfaces or to the specified outgoing interface.
Syntax	<pre>show ipv6 mld mapped-oif [interfaceType interfaceSpecifier] [filter]</pre> <ul style="list-style-type: none">■ interfaceType—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ interfaceSpecifier—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 mld oif-map

Description	Displays all outgoing interface (OIF) maps or the OIF map for the specified interface.
Syntax	<pre>show ipv6 mld oif-map [mapName] [filter]</pre> <ul style="list-style-type: none">■ mapName—Outgoing interface multicast map name■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 mld oif-mapping

Description Displays the mapped OIF to be assigned to a given map name, group address, and source address.

Syntax show ipv6 mld oif-mapping *mapName* [*groupAddress* [*sourceAddress*]] [*filter*]

- *mapName*—Outgoing interface multicast map name
- *groupAddress*—IPv6 address of a multicast group
- *sourceAddress*—IPv6 address of a multicast source
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld-proxy

Description Displays MLD proxy parameters on a virtual router.

Syntax show ipv6 mld-proxy [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld-proxy groups

Description Displays information about multicast groups that MLD proxy interfaces reported.

Syntax show ipv6 mld-proxy groups [*count*] [*groupAddress*] [*filter*]

- *count*—Displays the number of groups that MLD proxy reported
- *groupAddress*—IPv6 address of a group for which you want to display information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld-proxy interface

Description Displays information about the interface on which you configured MLD proxy.

Syntax show ipv6 mld-proxy interface [*brief*] [*delta*] [*interfaceType interfaceSpecifier*] [*filter*]

- *brief*—Displays summarized information
- *delta*—Displays baselined statistics
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mld ssm-mapping

Description Displays the SSM mapping state and the source list mapping associated with a multicast group address.

Syntax show ipv6 mld ssm-mapping [*groupAddress*] [*filter*]

- *groupAddress*—IP address of the group
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 mroute

Description Displays information about all or specified multicast routes.

Syntax show ipv6 mroute [*groupIpAddress* [*sourceIpAddress*]]
[*summary* | *count* | *statistics*] [*active* [*bandwidth*]] [*filter*]

- *groupIpAddress*—IPv6 address of a multicast group
- *sourceIpAddress*—IPv6 address of a multicast source
- *summary*—Displays brief information about the multicast routes
- *count*—Displays the number of groups and sources
- *statistics*—Displays statistics for packets received through multicast routes that the router has added to the multicast routing table and established on the appropriate line modules
- *active*—Displays active mroutes
- *bandwidth*—Admission bandwidth for active multicast routes that is greater than the specified bandwidth threshold; default is 4000 bps
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
active keyword added in JUNOS Release 8.1.0.

show ipv6 multicast protocols

Description Displays information about the multicast protocols enabled on the router.

Syntax show ipv6 multicast protocols [*brief*] [*filter*]

- *brief*—Displays a summary rather than detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 multicast routing

Description Displays information about the status of multicast routing on the router.

Syntax show ipv6 multicast routing [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 neighbors

Description	Displays IPv6 neighbor discovery cache information for both static and dynamic entries.
Syntax	<pre>show ipv6 neighbors [vrf vrfName] [ipv6Address] [interfaceType interfaceSpecifier] [static dynamic summary] [filter]</pre> <pre>show ipv6 neighbors summary [vrf vrfName] [filter]</pre> <ul style="list-style-type: none">■ <i>vrfName</i>—Name of the VRF■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ <i>static</i>—Displays information for only static entries■ <i>dynamic</i>—Displays information for only dynamic entries■ <i>summary</i>—Displays summary information■ <i>ipv6Address</i>—Specific IPv6 address■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0. vrf keyword and <i>vrfName</i> variable added in JUNOS Release 7.2.0.

show ipv6 ospf

Description	Displays general information about OSPFv3 routing processes.
Syntax	<pre>show ipv6 ospf [filter]</pre> <ul style="list-style-type: none">■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf border-routers

Description	Displays IPv6 routing table entries for area border and AS boundary routers.
Syntax	<pre>show ipv6 ospf border-routers [vrf vrfName] [filter]</pre> <ul style="list-style-type: none">■ <i>vrfName</i>—Name of the VRF■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf database

Description Displays an area-scoped link-state database for each area of which the router is a part, an interface-scoped link-state database for each interface, the external link-state database, the number of LSAs available in each category, and the number of LSAs that have reached the maximum age in each category. Specifying an LSA type, with or without identifying an advertising router, provides more detailed information for those LSAs.

Syntax `show ipv6 ospf database [vrf vrfName] [database-summary | { router | intra-area-prefix | link | network | inter-area-net | inter-area-router | external | grace } [advRouterId]] [filter]`

- *vrfName*—Name of the VRF
- *database-summary*—Displays summary of the database
- *router*—Displays V3 router link states
- *intra-area-prefix*—Displays V3 intra-area-prefix link states
- *link*—Displays V3 link local link states
- *network*—Displays V3 network link states
- *inter-area-net*—Displays V3 inter-area network link states
- *inter-area-router*—Displays V3 inter-area AS link states
- *external*—Displays V3 external link states
- *grace*—Displays V3 grace link states
- *advRouterId*—Advertising router ID
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
database-summary keyword added in JUNOS Release 7.3.0.
grace keyword added in JUNOS Release 8.1.0.

show ipv6 ospf internal-statistics

Description Displays internal OSPFv3 statistics.

Syntax `show ipv6 ospf internal-statistics [delta] [filter]`

- *delta*—Displays baselined information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf interface

Description Displays a list of OSPFv3 interfaces.

Syntax `show ipv6 ospf [areald | arealdInt] interface
[interfaceType interfaceSpecifier] [filter]`

- *areald*—OSPF area ID in IP address format
- *arealdInt*—OSPF area ID as a decimal value (0–4294967295)
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf neighbors

Description Displays a list of OSPFv3 neighbors.

Syntax `show ipv6 ospf [areald | arealdInt] neighbors [neighborAddress]
[interfaceType interfaceSpecifier] [filter]`

- *areald*—OSPF area ID in IP address format
- *arealdInt*—OSPF area ID as a decimal value (0–4294967295)
- *neighborAddress*—Router ID of a specified neighbor
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf summary-prefix

Description Displays summary prefixes configured to summarize externals.

Syntax show ipv6 ospf summary-prefix [*vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 ospf traffic

Description Displays OSPFv3 packet statistics.

Syntax show ipv6 ospf traffic [*delta*] [*filter*]

- *delta*—Displays baselined information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim

Description Displays general PIM router-level information.

Syntax show ipv6 pim

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim bsr

Description Displays BSR information and the group prefixes for which the local router is a C-RP in a PIM sparse mode environment.

Syntax show ipv6 pim bsr [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim interface

Description Displays information about each PIM IPv6 interface.

Syntax show ipv6 pim interface
{ summary | [*interfaceType interfaceSpecifier*] [detail | count] [*filter*] }

- summary—Displays the number of configured, enabled, and disabled PIM sparse mode interfaces
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- detail—Displays detailed information for all PIM interfaces or for a specified PIM interface
- count—Displays the number of incoming and outgoing PIM control packets
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim neighbor

Description Displays information about each PIM IPv6 neighbor that the router has discovered.

Syntax show ipv6 pim neighbor [*interfaceType interfaceSpecifier*] [detail] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- detail—Displays detailed information for all PIM neighbors or for a specified PIM neighbor
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim remote-neighbor

Description Displays information about all PIM IPv6 remote neighbors or the specified IPv6 remote neighbor.

Syntax show ipv6 pim remote-neighbor [*ipv6Address*] [*count*] [*filter*]

- *ipv6Address*—IPv6 address of a remote neighbor
- *count*—Displays the number of remote neighbors
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim rp

Description Displays information about PIM IPv6 group-to-RP mappings.

Syntax show ipv6 pim rp { *groupAddress* | *mapping* } [*filter*]

- *groupAddress*—IPv6 address of a group for which you want to view group-to-RP mappings
- *mapping*—Displays all group-to-RP mappings that the router has recorded
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim rp-hash

Description Displays which RP an IPv6 multicast group is using.

Syntax show ipv6 pim rp-hash *groupAddress* [*filter*]

- *groupAddress*—IPv6 address of multicast group for which you want to view the RP
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim sparse-mode sg-state

Description Displays information for each SG entry that PIM sparse mode knows about.

Syntax show ipv6 pim sparse-mode sg-state
[group *groupAddress* [source *sourceAddress*] | rp *rpAddress*] [count] [*filter*]

- *groupAddress*—IPv6 address of a multicast group
- *sourceAddress*—IPv6 address of a multicast source
- *rpAddress*—IPv6 address of an RP router
- count—Displays the number of SG entries
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim sparse-mode unicast-route

Description Displays the IPv6 unicast routes that PIM sparse mode is using.

Syntax show ipv6 pim sparse-mode unicast-route [*routeAddress routeMask* | *ipv6Prefix*]
[count] [*filter*]

- *routeAddress*—IPv6 address associated with a unicast route
- *routeMask*—Network mask associated with a unicast route
- *ipv6Prefix*—Prefix in the format *IPv6BaseAddress/length*; for example, 1::1/32
- count—Shows the number of unicast routes that PIM sparse mode is using
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 pim spt-threshold

Description Displays the threshold for switching to the shortest-path-tree at a PIM designated router.

Syntax show ipv6 pim spt-threshold [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ipv6 prefix-list

Description	Displays information about IPv6 prefix lists.
Syntax	<pre>show ipv6 prefix-list [<i>listName</i> [seq <i>seqNum</i> <i>ipv6Prefix</i> [longer first-match]]] [<i>filter</i>]</pre> <p>To display summary or detailed information:</p> <pre>show ipv6 prefix-list { summary detail } [<i>listName</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>listName</i>—Name of IPv6 prefix list ■ <i>seqNum</i>—Sequence number of prefix list entry ■ <i>ipv6Prefix</i>—Prefix of prefix list entry: in the format <i>IPv6baseaddress/length</i>; for example, 1::1/32 ■ longer—Displays all entries for a prefix that are equal to or more specific than the specified prefix ■ first-match—Displays only an entry that matches the specified prefix ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i> ■ summary—Displays summary information for all prefix lists or for a specified prefix list ■ detail—Displays detailed information for all prefix lists or for a specified prefix list
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 profile

Description	Displays the IPv6 profile configuration.
Syntax	<pre>show ipv6 profile <i>profileName</i> [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>profileName</i>—Name of the profile you want to display ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show ipv6 protocols

Description	Displays detailed information about IPv6 protocols currently configured on the router.
Syntax	<pre>show ipv6 protocols [vrf <i>vrfName</i>] [summary] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ summary—Displays only a list of currently configured protocols ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	<p>Command introduced before JUNOS Release 7.1.0.</p> <p>vrf keyword and <i>vrfName</i> variable added in JUNOS Release 7.2.0.</p>

show ipv6 redistribute

Description Displays configured IPv6 route redistribution policy.

Syntax show ipv6 redistribute [vrf *vrfName*] [*filter*]

- *vrfName*—Name of the VRF
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 route

Description Displays current state of the IPv6 routing table.

Syntax `show ipv6 route [vrf vrfName] [ipv6Address [detail] | ipv6Prefix [detail]] [all] [protocol] [filter]`

To display summary information:

`show ipv6 route summary [vrf vrfName] [filter]`

- *vrfName*—Name of the VRF
- *ipv6Address*—IPv6 address
- *ipv6Prefix*—Prefix of prefix list entry; in the format *IPv6baseaddress/length*; for example, 1::1/32
- *detail*—Displays detailed information about the specific route
- *all*—Displays routes from all sources to a prefix
- *protocol*—One of the following protocols for which you want to display the best routes in the routing table; no routes are displayed if routes for the specified protocol are not present in the routing table
 - *access*—Displays the best access-server routes (BGP) in the routing table
 - *access-internal*—Displays the best access-internal routes in the routing table
 - *bgp*—Displays the best BGP routes in the routing table
 - *bgp-tunnel*—Displays the best BGP tunnel routes in the routing table
 - *dvmrp*—Displays the best DVMRP routes in the routing table
 - *isis*—Displays the best IS-IS routes in the routing table
 - *ldp*—Displays the best LDP tunnel routes in the routing table
 - *local*—Displays the best locally connected routes in the routing table
 - *mbgp*—Displays the best MBGP routes in the routing table
 - *ospf*—Displays the best OSPF routes owned by in the routing table
 - *other*—Displays the best internal control routes in the routing table
 - *rip*—Displays the best RIP routes in the routing table
 - *rsvp*—Displays the best RSVP tunnel routes in the routing table
 - *static*—Displays the best static routes added by network management to the routing table
 - *static-rpf*—Displays the best static RPF routes added by network management to the routing table
- *filter*—See *Filtering show Commands in About This Guide*
- *summary*—Displays summary counters for all routes in the IPv6 routing table

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 routers

Description Displays IPv6 router advertisement information received by the E-series router.

Syntax show ipv6 routers [vrf *vrfName*] [*interfaceType* *interfaceSpecifier*] [*ipv6Address*]
[conflicts] [*filter*]

- *vrfName*—Name of the VRF
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *ipv6Address*—IPv6 address
- conflicts—Displays router advertisements that differ from the currently configured advertisements
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 rpf-route

Description Displays IPv6 routes that the router can use to verify source addresses in multicast packets.

Syntax `show ipv6 rpf-route [vrf vrfName] [ipv6Address [detail] | ipv6Prefix [detail]] [all] [protocol] [filter]`

- *vrfName*—Name of the VRF
- *ipv6Address*—Specific IPv6 address to show
- *ipv6Mask*—IPv6 mask of the specific address to show
- *detail*—displays detailed information about the specified route
- *all*—Displays routes from all sources to a prefix
- *protocol*—One of the following protocols for which you want to display the best routes in the routing table; no routes are displayed if routes for the specified protocol are not present in the routing table
 - *access*—Displays the best access-server routes (BGP) in the routing table
 - *access-internal*—Displays the best access-internal routes in the routing table
 - *bgp*—Displays the best BGP routes in the routing table
 - *bgp-tunnel*—Displays the best BGP tunnel routes in the routing table
 - *dvmrp*—Displays the best DVMRP routes in the routing table
 - *isis*—Displays the best IS-IS routes in the routing table
 - *ldp*—Displays the best LDP tunnel routes in the routing table
 - *local*—Displays the best locally connected routes in the routing table
 - *mbgp*—Displays the best MBGP routes in the routing table
 - *ospf*—Displays the best OSPF routes owned by in the routing table
 - *other*—Displays the best internal control routes in the routing table
 - *rip*—Displays the best RIP routes in the routing table
 - *rsvp*—Displays the best RSVP tunnel routes in the routing table
 - *static*—Displays the best static routes added by network management to the routing table
 - *static-rpf*—Displays the best static RPF routes added by network management to the routing table
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 static

Description Displays general status information for static routes added by network management to the routing table.

Syntax show ipv6 static [vrf *vrfName*] [*ipv6Prefix* [all]] [*filter*]

- *vrfName*—Name of the VRF
- *ipv6Prefix*—Prefix in the format *IPv6baseaddress/length*; for example, 1::1/32
- all—Displays all routes starting at the specified prefix
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 traffic

Description Displays statistics about IPv6 traffic.

Syntax show ipv6 traffic [vrf *vrfName*] [delta] [*filter*]

- *vrfName*—Name of the VRF
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 tunnel-route

Description Displays current state of the IPv6 tunnel routing table.

Syntax `show ipv6 tunnel-route [vrf vrfName] [ipv6Address [detail] | ipv6Prefix [detail]] [all] [protocol] [filter]`

- *vrfName*—Name of the VRF
- *ipv6Address*—IPv6 address
- *ipv6Prefix*—Prefix of prefix list entry; in the format *IPv6baseaddress/length*; for example, `1::1/32`
- *detail*—Displays detailed information about the specific route
- *all*—Displays all routes in the IPv6 tunnel routing table inserted from all protocols, not just the best routes
- *protocol*—The following protocols for which you want to display the best route or all routes in the tunnel routing table; no routes are displayed if routes for the specified protocol are not present in the tunnel routing table



NOTE: Other protocol options are available in the CLI, but they are not applicable to the tunnel routing table.

- *bgp-tunnel*—Displays the BGP tunnel routes in the tunnel routing table
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show ipv6 udp statistics

Description Displays IPv6 UDP statistics.

Syntax `show ipv6 udp statistics [vrf vrfName] [delta] [filter]`

- *vrfName*—Name of the VRF
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
vrf keyword and *vrfName* variable added in JUNOS Release 7.2.0.

show isis database

Description Displays the IS-IS link-state database.

Syntax show isis database [level-1 | level-2 | l1 | l2 | *lspid* | *hostname* | detail | verbose]*
[*filter*]

- level-1—Displays the IS-IS link-state database for level 1
- level-2—Displays the IS-IS link-state database for level 2
- l1—Displays the IS-IS link-state database for level 1
- l2—Displays the IS-IS link-state database for level 2
- *lspid*—Link-state PDU identifier in the form xxxx.xxxx.xxxx.yy.zz; when specified, displays the contents of a single link-state PDU by its ID number
- *hostname*—Displays the IS-IS link-state database for the specified hostname
- detail—Additionally displays contents of each link-state PDU; if not specified, a summary display is provided
- verbose—Additionally displays MPLS traffic engineering information
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
hostname variable added in JUNOS Release 7.3.0.

show isis mpls adjacency-log

Description Displays a log of the last 20 IS-IS adjacency changes.

Syntax show isis mpls [traffic-eng] adjacency-log [*filter*]

- traffic-eng—Specifies optional keyword for compatibility with non-E-series implementations
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show isis mpls advertisements

Description	Displays the last record flooded from MPLS.
Syntax	<pre>show isis mpls [traffic-eng] advertisements [filter]</pre> <ul style="list-style-type: none"> ■ traffic-eng—Specifies optional keyword for compatibility with non-E-series implementations ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show isis mpls tunnel

Description	Displays information about tunnels used in the calculation of IS-IS next hops.
Syntax	<pre>show isis mpls [traffic-eng] tunnel [filter]</pre> <ul style="list-style-type: none"> ■ traffic-eng—Specifies optional keyword for compatibility with non-E-series implementations ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show isis nsf

Description	Displays information about the configured and operational settings on the router for IS-IS graceful restart. Graceful restart is also known as nonstop forwarding (NSF).
Syntax	<pre>show isis nsf</pre>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show isis spf-log

Description	Displays how often and why the router has run a full SPF calculation.
Syntax	<pre>show isis spf-log [detail] [filter]</pre> <ul style="list-style-type: none"> ■ detail—Displays the time it takes to perform the route table update and the time it takes to leak the routes across ISIS levels ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show isis summary-addresses

Description Displays aggregate address information for IS-IS.

Syntax show isis summary-addresses [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show isis topology

Description Displays the paths to all intermediate systems.

Syntax show isis topology [[level-1 | level-2 | l1 | l2]* [*nsap*]
[level-1 | level-2 | l1 | l2]*] [*filter*]

- level-1—Displays paths to all level 1 routers in the area
- level-2—Displays paths to all level 2 routers in the domain
- l1—Displays paths to all level 1 routers in the area
- l2—Displays paths to all level 2 routers in the domain
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *nsap*—NSAP address
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show issu

Description Displays the current status of unified ISSU operation.

Syntax show issu [brief | detail] [*filter*]

- brief—Displays hardware and software criteria required for unified ISSU to begin and whether criteria are met
- detail—Displays detailed information about unified ISSU status and warnings in addition to criteria required for unified ISSU and whether criteria are met
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 9.0.0.

show l2c

Description Displays information about the ANCP configuration on the router.

Syntax show l2c

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2c discovery-table

Description Displays information about ANCP discovery table entries.

Syntax show l2c discovery-table [neighbor *neighborName*] [end-user-id *userIdString*]
[brief]

- *neighborName*—Name of the neighbor for which you want to view ANCP discovery table information
- *userIdString*—ID of the neighbor for which you want to view ANCP discovery table information
- brief—Displays limited information

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show l2c label

Description Displays information about known ANCP labels on the router.

Syntax show l2c label [interface *interfaceType interfaceSpecifier*]
[neighbor-input | neighbor-output] [brief]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- neighbor-input—Displays labels for input ports
- neighbor-output—Displays labels for output ports
- brief—Displays limited information

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2c neighbor

Description Displays information about known ANCP neighbors on the router and their configurations.

Syntax To display information about all ANCP neighbors:
show l2c neighbor [name *neighborName* | id *neighborIdMac*] [brief]

To display the number of active neighbors:
show l2c neighbor [summary]

- *neighborName*—Name of the neighbor for which you want to view ANCP information
- *neighborIdMac*—ID of the neighbor for which you want to view ANCP information
- brief—Displays limited information
- summary—Displays the number of active neighbors

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2c statistics

Description Displays information about the ANCP statistics.

Syntax show l2c statistics [delta]

- delta—Limits the display to events that occurred after the baseline

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp

Description Displays information about the L2TP configuration on the router.

Syntax show l2tp [filter]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp destination

Description	Displays information about selected L2TP destinations.
Syntax	<pre>show l2tp destination [detail] [destinationName [virtual-router vrName] ip ipAddress] [filter] show l2tp destination summary [filter]</pre> <ul style="list-style-type: none"> ■ detail—Provides complete information about the specified destinations, including destination profiles ■ destinationName—Name the router assigns to the peer at the other end of the tunnel ■ vrName—Name of the virtual router on which the destination exists ■ ipAddress—IP address of the peer at the other end of the tunnel ■ summary—Displays a summary of destination profile configuration ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show l2tp destination lockout

Description	Displays information about the L2TP destinations that are currently unavailable because they are in the lockout state.
Syntax	<pre>show l2tp destination lockout [filter]</pre> <ul style="list-style-type: none"> ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.2.0.

show l2tp destination profile

Description Displays destination profile configuration.

Syntax show l2tp destination profile [*profileName*] [*filter*]

- *profileName*—Name of a profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp dial-out

Description Displays the chassis-wide configuration, operational state, and statistics for L2TP dial-out.

Syntax show l2tp dial-out [[*detail*] [*state operState*] | *summary*] [*filter*]

- *detail*—Displays configuration, states, and statistics
- *operState*—One of the following operational states:
 - *inService*
 - *initIncomplete*
 - *restricted*
- *summary*—Displays aggregate counts for virtual routers, targets, and sessions in each of the possible operational and administrative states
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp dial-out session

Description Displays the status of L2TP dial-out sessions.

Syntax `show l2tp dial-out session [triggerIpAddress | allVirtualRouters] [detail] [state operState] [filter]`

To display summary information:

`show l2tp dial-out session summary [allVirtualRouters] [filter]`

- *triggerIpAddress*—Trigger IP address for the session that you want to display
- allVirtualRouters—Displays dial-out information for all virtual routers
- detail—Displays configuration, state, and statistics
- *operState*—One of the following operational states:
 - authenticating
 - connecting
 - dormant
 - failed
 - inService
 - inhibited
 - pending
 - postInhibited
- *filter*—See *Filtering show Commands* in *About This Guide*
- summary—Displays aggregate counts for dial-out sessions in each of the possible operational and administrative states

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp dial-out target

Description Displays configured dial-out targets within the current virtual router context.

Syntax `show l2tp dial-out target [targetIpAddress targetIpAddressMask | allVirtualRouters]
[detail] [state operState] [filter]`

To display summary information:

`show l2tp dial-out target summary [allVirtualRouters] [filter]`

- *targetIpAddress*—Trigger IP address for the target that you want to display
- *targetIpAddressMask*—Mask for the trigger IP address
- allVirtualRouters—Displays dial-out information for all virtual routers
- detail—Displays configuration, state, and statistics
- *operState*—One of the following operational states:
 - down
 - inService
 - inhibited
- *filter*—See *Filtering show Commands* in *About This Guide*
- summary—Displays aggregate counts for targets in each of the possible operational and administrative states

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show l2tp dial-out virtual-router

Description	Displays dial-out state machine operational status and statistics within the current virtual router context.
Syntax	<pre>show l2tp dial-out virtual-router [allVirtualRouters] [detail] [state operState] [filter]</pre> <p>To display summary information:</p> <pre>show l2tp dial-out virtual-router summary [allVirtualRouters] [filter]</pre> <ul style="list-style-type: none"> ■ <i>allVirtualRouters</i>—Displays dial-out information across all virtual routers ■ <i>detail</i>—Displays configuration, state, and statistics ■ <i>operState</i>—One of the following operational states: <ul style="list-style-type: none"> ■ <i>down</i> ■ <i>inService</i> ■ <i>initFailed</i> ■ <i>initPending</i> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i> ■ <i>summary</i>—Displays aggregate counts for dial-out state machines in each of the possible operational and administrative states
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show l2tp received-disconnect-cause-summary

Description	Displays aggregate summary statistics for all information received by an LAC from an LNS about the cause of an L2TP session disconnection. The LAC receives this information from the LNS by means of a PPP Disconnect Cause Code attribute value pair (AVP) included in an L2TP Call-Disconnect-Notify (CDN) message.
Syntax	<pre>show l2tp received-disconnect-cause-summary [filter]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show l2tp session

Description	Displays detailed information about selected L2TP sessions or summary information for all L2TP sessions.
Syntax	<pre>show l2tp session [detail] [state { adminState ifOperStatus }] [l2tpName [virtual-router vrName] ip ipAddress [l2tpNameNoDest]] [filter]</pre> <p>To display summary information: show l2tp session summary [filter]</p> <ul style="list-style-type: none">■ detail—Provides complete information about the specified sessions■ state—Restricts display to sessions in a specific state■ adminState—Effective administrative state■ ifOperStatus—Operational state■ l2tpName—Session name■ vrName—Name of the virtual router on which the session exists■ ipAddress—IP address■ l2tpNameNoDest—Name of the session■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>■ summary—Displays the configured and operational status of all L2TP sessions
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show l2tp switch-profile

Description	Displays the names of all L2TP tunnel switch profiles currently configured on the router, or displays detailed information about a particular L2TP tunnel switch profile.
Syntax	<pre>show l2tp switch-profile [profileName] [filter]</pre> <ul style="list-style-type: none">■ profileName—Name of the tunnel switch profile; a string of up to 64 alphanumeric characters■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.2.0.

show l2tp tunnel

Description	Displays detailed information about the configured and operational status of selected L2TP tunnels or summary information for all L2TP tunnels.
Syntax	<pre>show l2tp tunnel [detail] [state { adminState ifOperStatus failover-resync failoverResyncMode }] [l2tpName [virtual-router vrName] ip ipAddress [l2tpNameNoDest]] [filter]</pre> <p>To display summary information:</p> <pre>show l2tp tunnel summary [filter]</pre> <ul style="list-style-type: none"> ■ detail—Provides complete information about the specified sessions, including the L2TP host profile name ■ adminState—Displays information about tunnels only with the specified effective administrative state <ul style="list-style-type: none"> ■ enabled—Effective administrative state is disabled ■ disabled—Effective administrative state is enabled ■ drain—Effective administrative state is drain ■ ifOperStatus—Displays information about tunnels only with the specified operational state <ul style="list-style-type: none"> ■ up—Operational state is up ■ down—Operational state is down ■ lower-down—Operational state is lower down ■ not-present—Operational state is not-present ■ failoverResyncMode—Displays information about tunnels that use the specified failover resynchronization mode: <ul style="list-style-type: none"> ■ disable—Peer failover resynchronization is disabled ■ failover-protocol—Uses the L2TP failover protocol method ■ failover-protocol-fallback-to-silent-failover—Uses the L2TP failover protocol method; however, if the peer does not support this method, the silent failover method is used ■ not-configured—Uses the global failover method because peer failover resynchronization is not configured for L2TP host profiles and AAA domain map tunnels ■ silent-failover—Uses the L2TP silent failover method ■ l2tpName—Tunnel name ■ vrName—Name of the virtual router on which the tunnel exists ■ ipAddress—IP address ■ l2tpNameNoDest—Tunnel name ■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i> ■ summary—Displays the configured and operational status of all L2TP tunnels
Mode	Privileged Exec
Release Information	<p>Command introduced before JUNOS Release 7.1.0.</p> <p>failover-resync keyword and <i>failoverResyncMode</i> variable added in JUNOS Release 9.0.0.</p>

show l2vpn connections

Description Displays information about L2VPN point-to-point connections.

Syntax show l2vpn connections
[details | instance *l2VpnName* | remote-site *siteId* | state down | state up]* [*filter*]

- details—Displays detailed information about all L2VPN connections
- *l2VpnName*—Name of the L2VPN instance
- *siteId*—Numerical identifier for the site, in the range 1–65535
- state down—Displays information about nonoperational L2VPN connections
- state up—Displays information about operational L2VPN connections
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line; parameters can be entered in any order
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

Related Topics

- Monitoring L2VPN Connections

show l2vpn instance

Description Displays all L2VPN instances on the VR or information about the specified L2VPN instance.

Syntax show l2vpn instance { all | *l2VpnName* } [detail] [*filter*]

- instance—Displays information for all L2VPN instances
- *l2VpnName*—Name of the L2VPN instance
- detail—Displays detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

Related Topics

- Monitoring L2VPN Instances

show l2vpn interface

Description Displays information about L2VPN interfaces configured to be members of L2VPNs in the current VR: all L2VPN interfaces in the specified L2VPN instance, all L2VPN interfaces in all L2VPN instances, or a specific L2VPN interface.

Syntax `show l2vpn interface [instance l2VpnName | interfaceType interfaceSpecifier] [detail] [filter]`

- *l2VpnName*—Name of the L2VPN instance
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *detail*—Displays detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

Related Topics

- Monitoring L2VPN Interfaces

show last-reset

Description Displays information describing the reason for the router's last reload, whether specified by the user or resulting from a router problem.

Syntax `show last-reset [filter]`

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ldp

Description Displays the status of LDP.

Syntax `show [mpls] ldp [filter]`

- *mpls*—Specifies optional keyword for compatibility with non-E-series implementations
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ldp binding

Description Displays label bindings from the MPLS label information base. This command displays the same output as the **show mpls binding** command.

Syntax For MPLS binding information:

```
show [ mpls ] ldp { [ ip ] binding | binding ip }  
[ destAddr [ maskLength | maskAddress ] [ longer-prefixes ] ]  
[ interface interfaceType interfaceSpecifier ]  
[ neighbor ipAddress ] [ generic | atm ] [ local | remote ]  
[ label { atm vpi vci | explicit-null-label | implicit-null-label |  
labelNumber [ labelRangeEnd ] } ]  
[ brief ] [ filter ]
```

For layer 2 over MPLS binding information:

```
show [ mpls ] ldp binding layer2-vc [ vc-type vcType [ vc-id vcid ] ]  
[ interface interfaceType interfaceSpecifier ]  
[ neighbor ipAddress ] [ generic | atm ] [ local | remote ]  
[ label { atm vpi vci | explicit-null-label | implicit-null-label |  
labelNumber [ labelRangeEnd ] } ]  
[ brief ] [ filter ]
```

- *mpls*—Specifies optional keyword for compatibility with non-E-series implementations
- *ip*—Specifies optional keyword for compatibility with non-E-series implementations when placed before the **binding** keyword; when present (either before or after this keyword) displays label binding information only for IP prefixes
- *destAddr*—Destination address for which you want information displayed; if not specified, displays all destinations
- *maskLength*—Prefix length for the destination address
- *maskAddress*—Address mask to be applied to the destination address
- *longer-prefixes*—Displays information for prefixes that are equal to or more specific than the specified prefix
- *interface*—Displays labels associated with the specified interface
 - *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *ipAddress*—Displays labels associated with the specified neighbor
- *generic*—Displays only generic labels
- *atm*—Displays only ATM VPI/VCI labels
- *local*—Displays only local labels
- *remote*—Displays only remote labels
- *atm*—Displays the specified ATM VPI/VCI labels
 - *vpi*—Specifies ATM VPI that partially designates a label
 - *vci*—Specifies ATM VCI that partially designates a label

- **explicit-null-label**—Displays binding information for the explicit null label
- **implicit-null-label**—Displays binding information for the implicit null label
- **labelNumber**—Label for which binding information is displayed; number in the range 16–1048575
- **labelRangeEnd**—Label designating the high end of a range of labels for which binding information is specified; number in the range 16–1048575
- **brief**—Displays limited information
- **filter**—See *Filtering show Commands* in *About This Guide*
- **layer2-vc**—Displays binding information for layer 2 over MPLS
- **vcType**—One of the following types of virtual circuit over MPLS for which binding information is displayed: aal5-vc, ethernet, frame-relay, vlan
- **vcId**—Virtual circuit identifier, number in the range 1–4294967295

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.
explicit-null-label keyword and optional **mpls** keyword added in JUNOS Release 7.2.0.

show ldp graceful-restart

Description Displays the status of LDP graceful restart.

Syntax show [mpls] ldp graceful-restart [filter]

- **mpls**—Specifies optional keyword for compatibility with non-E-series implementations
- **graceful-restart**—Displays graceful restart information
- **filter**—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ldp igp-sync

Description Displays information about all interfaces that are synchronizing with LDP or about the specified interface that is synchronizing with LDP.

Syntax show [mpls] ldp igp-sync [interface *interfaceType interfaceSpecifier*]

- **mpls**—Specifies optional keyword for compatibility with non-E-series implementations
- **interfaceType**—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- **interfaceSpecifier**—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

show ldp interface

Description	Displays information about all LDP interfaces or a specific LDP interface.
Syntax	<pre>show [mpls] ldp interface [interfaceType interfaceSpecifier [brief]] [filter]</pre> <ul style="list-style-type: none">■ mpls—Specifies optional keyword for compatibility with non-E-series implementations■ interfaceType—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ interfaceSpecifier—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i>■ brief—Displays only brief or summary information about the interface or all interfaces■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	User Exec
Release Information	Command introduced in JUNOS Release 7.1.0. Optional mpls keyword added in JUNOS Release 7.2.0.

show ldp neighbor

Description	Displays information about LDP neighbors.
Syntax	<pre>show [mpls] ldp neighbor [ipAddress] [brief graceful-restart statistics] [filter]</pre> <ul style="list-style-type: none">■ mpls—Specifies optional keyword for compatibility with non-E-series implementations■ ipAddress—IP address of the remote peer■ brief—Displays only brief or summary information about the LDP neighbors■ graceful-restart—Displays graceful restart information for the neighbor■ statistics—Displays statistics about the sessions with each LDP neighbor■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0. graceful-restart keyword added in JUNOS Release 7.1.0. mpls keyword made optional in JUNOS Release 7.2.0. brief and statistics keywords added in JUNOS Release 8.1.0.

show ldp profile

Description Displays a specific LDP profile, or all LDP profiles.

Syntax show [mpls] ldp profile [*profileName*] [*filter*]

- mpls—Specifies optional keyword for compatibility with non-E-series implementations
- *profileName*—Name of the profile to be displayed
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ldp statistics

Description Displays statistics information for LDP on the current virtual router.

Syntax show [mpls] ldp statistics [*filter*]

- mpls—Specifies optional keyword for compatibility with non-E-series implementations
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

show ldp targeted session

Description Displays information about the LDP targeted sessions.

Syntax show [mpls] ldp targeted session [all | receive | send]

- mpls—Specifies optional keyword for compatibility with non-E-series implementations
- all—Displays all targeted sessions
- receive—Displays only targeted receive sessions
- send—Displays only targeted send sessions

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
mpls keyword made optional in JUNOS Release 7.2.0.

show ldp vpls

Description Displays MPLS configuration information for a VPLS instance that uses LDP as the signaling protocol. You can display information for a specific VPLS instance, for a specific neighbor address, or for all VPLS instances configured on the router.

Syntax show [mpls] ldp vpls [*vplsName* | neighbor *ipAddress*] [*filter*]

- *mpls*—Specifies optional keyword for compatibility with non-E-series implementations
- *vplsName*—Name of a VPLS instance created with the **bridge vpls transport-virtual-router** command
- *ipAddress*—IP address of a neighbor in the VPLS domain
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.2.0.

Related Topics

- Monitoring LDP-Related Settings for VPLS

show license

Description Displays all licenses or a specified license.



NOTE: The **show license l2tp-session** command remains in the CLI even though a separate L2TP license is no longer required to enable support for 32,000 L2TP sessions on supported systems.

Syntax show license [*licenseType*] [*filter*]

- *licenseType*—bfd, b-ras, firewall, ipsec-tunnels, ipv6, l2tp-session, nat, or service-management
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
service-management keyword added in JUNOS Release 7.2.0.

show license mobile-ip home-agent

Description	Displays the license key information for the Mobile IP home agent in the current virtual router.
Syntax	show license mobile-ip home-agent
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 9.0.0.

show line console 0

Description	Displays the speed configured for all future console sessions and the current console session.
Syntax	show line console 0 [<i>filter</i>] <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show line vty

Description	Displays the configuration of vty lines.
Syntax	show line vty <i>lineNumber</i> [<i>filter</i>] <ul style="list-style-type: none"> ■ <i>lineNumber</i>—Number of the vty line; only line numbers that you have configured are available for display ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show log configuration

Description	Displays information about the logging configuration settings for a selected category.
Syntax	show log configuration [<i>category</i> <i>eventCategory</i>] [<i>filter</i>] <ul style="list-style-type: none"> ■ <i>eventCategory</i>—Log category to be displayed; refer to the CLI online help for available options ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show log data

Description Displays the system log.

Syntax `show log data [nv-file | category eventCategory]
[severity { severityValue | severityNumber }] [delta] [filter]`

- *nv-file*—Displays the nv-file log
- *eventCategory*—Log category to display; refer to the CLI online help for available options
- *severity*—Minimum severity of the log messages displayed; described either by a descriptive term—*severityValue*—or by a corresponding number—*severityNumber*—in the range 0–7; the lower the number, the higher the priority:
 - *emergency or 0*—System unusable
 - *alert or 1*—Immediate action needed
 - *critical or 2*—Critical condition exists
 - *error or 3*—Error condition
 - *warning or 4*—Warning condition
 - *notice or 5*—Normal but significant condition
 - *info or 6*—Informational message
 - *debug or 7*—Debug message
- *delta*—Limits the display to events that occurred after the baseline
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mirror log

Description Displays a log of failure messages for secure policy lists. By default, you must have CLI user access level 13 or above to use this command; an administrator can modify the user access level requirement.

Syntax show mirror log [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Failure Messages for Secure Policies
- Monitoring Information for Secure Policies
- Logging Packet Mirroring Information

show mirror rules

Description Displays information about the policy rules that are configured for packet mirroring.

Syntax show mirror rules [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Packet Mirroring Triggers

show mirror subscribers

Description Displays information about subscribers who have current packet mirroring sessions.

Syntax show mirror subscribers [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mirror trap

Description	Displays the status (enabled or disabled) of SNMP secure traps.
Syntax	show mirror trap
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.2.0.
Related Topics	<ul style="list-style-type: none">■ Monitoring SNMP Secure Packet Mirroring Traps

show mpls

Description	Displays status and configuration information about MPLS on the router or on specific interfaces.
Syntax	show mpls [detail] [filter] <ul style="list-style-type: none">■ detail—Displays detailed information■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0. detail keyword added in JUNOS Release 7.1.0.

show mpls binding

Description	Displays label bindings from the MPLS label information base. This command displays the same output as the show ldp binding command.
Syntax	<p>For MPLS binding information:</p> <pre>show mpls { [ip] binding binding ip } [destAddr [maskLength maskAddress] [longer-prefixes]] [interface interfaceType interfaceSpecifier] [neighbor ipAddress] [generic atm] [local remote] [label { atm vpi vci explicit-null-label implicit-null-label labelNumber [labelRangeEnd] }] [brief] [filter]</pre> <p>For layer 2 over MPLS binding information:</p> <pre>show mpls binding layer2-vc [vc-type vcType [vc-id vcid]] [interface interfaceType interfaceSpecifier] [neighbor ipAddress] [generic atm] [local remote] [label { atm vpi vci explicit-null-label implicit-null-label labelNumber [labelRangeEnd] }] [brief] [filter]</pre>

- **ip**—Specifies optional keyword for compatibility with non-E-series implementations when placed before the **binding** keyword; when present (either before or after this keyword) displays label binding information only for IP prefixes
- **destAddr**—Destination address for which you want information displayed; if not specified, displays all destinations
- **maskLength**—Prefix length for the destination address
- **maskAddress**—Address mask to be applied to the destination address
- **longer-prefixes**—Displays information for prefixes that are equal to or more specific than the specified prefix
- **interface**—Displays labels associated with the specified interface
 - **interfaceType**—Interface type; see *Interface Types and Specifiers* in *About This Guide*
 - **interfaceSpecifier**—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- **ipAddress**—Displays labels associated with the specified neighbor
- **generic**—Displays only generic labels
- **atm**—Displays only ATM VPI/VCI labels
- **local**—Displays only local labels
- **remote**—Displays only remote labels
- **atm**—Displays the specified ATM VPI/VCI labels
 - **vpi**—Specifies ATM VPI that partially designates a label
 - **vci**—Specifies ATM VCI that partially designates a label
- **explicit-null-label**—Displays binding information for the explicit null label
- **implicit-null-label**—Displays binding information for the implicit null label
- **labelNumber**—Label for which binding information is displayed; number in the range 16–1048575
- **labelRangeEnd**—Label designating the high end of a range of labels for which binding information is specified; number in the range 16–1048575
- **brief**—Displays limited information
- **filter**—See *Filtering show Commands* in *About This Guide*
- **layer2-vc**—Displays binding information for layer 2 over MPLS
- **vcType**—One of the following types of virtual circuit over MPLS for which binding information is displayed: aal5-vc, ethernet, frame-relay, vlan
- **vcId**—Virtual circuit identifier, number in the range 1–4294967295

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
explicit-null-label keyword added in JUNOS Release 7.2.0.

show mpls cross-connects atm

Description Displays all ATM passthrough connections between local subinterfaces.

Syntax show mpls cross-connects atm [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring ATM Cross-Connects for Layer 2 Services over MPLS
- Configuring Local ATM Cross-Connects with AAL5 Encapsulation

show mpls explicit-paths

Description Displays all explicit paths or a particular explicit path.

Syntax show { mpls | ip } explicit-paths
[detail | { name *pathName* | identifier *pathNum* }] [*filter*]

- mpls—Specifies keyword for JUNOS MPLS implementation
- ip—Specifies keyword for compatibility with non-E-series implementations
- detail—Specifies a verbose display [not currently supported]
- *pathName*—Name that identifies an explicit path
- *pathNum*—Number that identifies an explicit path
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls fast-reroute database

Description Displays information about the backup state of protected primary tunnels.

Syntax `show mpls [traffic-eng] fast-reroute database [ipAddress]
[name tunnelName] [interface interfaceType interfaceSpecifier]
[status { all | desired | establishing | established | active | unknown }]
[count-only] [filter]`

- *traffic-eng*—Specifies optional keyword for compatibility with non-E-series implementations
- *ipAddress*—Address of the endpoint for the primary LSP; meaningful only for the tunnel ingress node
- *tunnelName*—Name of the primary LSP; meaningful only for the tunnel ingress node
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *status*—Displays only entries with the specified status:
 - *all*—Displays all entries regardless of backup protection status
 - *desired*—Displays entries where backup protection is desired
 - *establishing*—Displays entries where backup protection is being established
 - *established*—Displays entries where backup protection is established
 - *active*—Displays entries where backup protection is active
 - *unknown*—Displays entries where status of backup protection is unknown
- *count-only*—Displays count of entries matching command specification
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls forwarding

Description Displays the MPLS forwarding table.

Syntax show mpls forwarding
[interface *interfaceType interfaceSpecifier*] [bgp | ldp | rsvp-te]
[label { atm *vpi vci* | *labelNumber* [*labelRangeEnd*] }]
[brief | bindings | bindings delta | delta] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- bgp—Displays BGP-specific forwarding information
- ldp—Displays LDP-specific forwarding information
- rsvp-te—Displays RSVP-TE-specific forwarding information
- atm—Displays information for the specified ATM VPI/VCI labels
 - *vpi*—Specifies ATM VPI that partially designates a label
 - *vci*—Specifies ATM VCI that partially designates a label
- *labelNumber*—Label number, in the range 16–1048575
- *labelRangeEnd*—Number, in the range 16–1048575, that specifies the high end of a range of labels
- brief—Displays only brief or summary information about the tunnels
- bindings—Displays protocol-specific label-to-FEC bindings
- detail—Displays detailed information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring LDP-Related Settings for VPLS
- Monitoring MPLS Forwarding for Layer 2 Services over MPLS
- Monitoring MPLS Forwarding State for L2VPN (VPWS) Instances

show mpls interface

Description Displays status and configuration information about MPLS major interfaces, shim interfaces, minor interfaces or all MPLS interfaces (the default) on the router.

Syntax `show mpls interface [major | shim | minor]
[summary | [state not-up] [brief | detail]
[interfaceType interfaceSpecifier | name tunnelName] [delta] [filter]`

- *major*—Displays information about MPLS major interfaces
- *shim*—Displays information about shim interfaces used for layer 2 over MPLS
- *minor*—Displays information about MPLS minor interfaces
- *summary*—Displays summary information about MPLS interfaces
- *state not-up*—Displays information only about interfaces that are not operationally up
- *brief*—Displays limited interface information
- *detail*—Displays detailed information
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *tunnelName*—Name of the tunnel represented by the MPLS minor interface
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.
minor, **detail**, and **delta** keywords added in JUNOS Release 7.1.0.
name keyword and *tunnelName* variable added in JUNOS Release 7.1.0.
summary keyword added in JUNOS Release 8.0.0.

Related Topics

- Monitoring MPLS Layer 2 Interfaces for Layer 2 Services over MPLS

show mpls l2transport interface

Description Displays status and configuration information about layer 2 services over MPLS (also known as Martini, or layer 2 transport) on the router or on specific interfaces.

Syntax show mpls l2transport interface
[summary | [*interfaceType* *interfaceSpecifier*] [brief | detail] [state not-up] [delta]]
[*filter*]

- summary—Displays summary information about layer 2 services over MPLS
- *interfaceType*—Displays information only for the specified MPLS interface; if not specified, information for all interfaces is displayed
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- brief—Displays limited interface information
- detail—Provides expanded information about layer 2 services, rather than a summary
- state not-up—Displays information only about interfaces that are not up
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
summary keyword added in JUNOS Release 8.0.0.

Related Topics

- Monitoring MPLS Layer 2 Interfaces for Layer 2 Services over MPLS
- Monitoring the Policy Configuration of Layer 2 Services over MPLS

show mpls l2transport load-balancing-group

Description Displays information about all configured load-balanced Martini circuits or a specified circuit.

Syntax show mpls l2transport load-balancing-group [*groupNumber*]
[member-circuits [brief]] [*filter*]

- *groupNumber*—Displays information for the specified group number
- member-circuits—Displays member circuit information, including candidate ports, member circuits, and member subinterfaces
- brief—Displays summary information for the member circuits
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls minor-interface

Description	Displays status and configuration for all minor interfaces in the current router context.
Syntax	<pre>show mpls minor-interface [summary [state not-up] [brief detail] [name <i>tunnelName</i>] [delta]] [filter]</pre> <ul style="list-style-type: none"> ■ <i>summary</i>—Displays summary information about minor interfaces ■ <i>state not-up</i>—Displays information only about interfaces that are not operationally up ■ <i>brief</i>—Displays only brief or summary information about the minor interfaces ■ <i>detail</i>—Provides expanded information about minor interfaces, rather than a summary ■ <i>tunnelName</i>—Name of the tunnel represented by the MPLS minor interface ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.1.0.

show mpls next-hop

Description	Displays MPLS next hops and any available next-hop statistics. Next hops can be pointed to by MPLS forwarding entries on an LSR, IP or IPv6 routes on an LER, and VPLS bridge groups.
Syntax	<pre>show mpls next-hop [<i>nextHopIndex</i>] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>nextHopIndex</i>—Number identifying a next hop, in the range 1–1048575 ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.1.0.

show mpls phb-id

Description Displays the PHB identifiers for MPLS.

Syntax show mpls phb-id

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls profile

Description Displays a specific RSVP-TE or tunnel profile, or all RSVP-TE or tunnel profiles.

Syntax show mpls { rsvp | tunnels } profile [*profileName*] [*filter*]

- rsvp—Specifies the RSVP-TE profile
- tunnels—Specifies the tunnel profile
- *profileName*—Name of the profile to be displayed
- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls rsvp

Description Displays RSVP path control blocks, reservation state control blocks, or complete RSVP session information for the virtual router.

Syntax show mpls rsvp { psb | rsb | sessions }

- psb—Displays path state control blocks
- rsb—Displays reservation state control blocks
- sessions—Displays RSVP session information

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls rsvp authentication

Description Displays information about RSVP authentication.

Syntax show mpls rsvp authentication [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mpls rsvp bfd interfaces

Description Displays session information for RSVP-TE interfaces on which BFD is enabled, including minimum interval, minimum receive interval, minimum transmit interval, and multiplier values.

Syntax show mpls rsvp bfd interfaces [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.1.0.

show mpls rsvp counters

Description Displays various counters for RSVP interfaces.

Syntax show mpls rsvp counters [interface *interfaceType interfaceSpecifier*] [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
filter variable added in JUNOS Release 7.1.0.

show mpls rsvp hello graceful restart

Description Displays status of RSVP-TE graceful restart.

Syntax show mpls rsvp hello graceful restart [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.0.0.

show mpls rsvp hello instance

Description Displays information from RSVP-TE hello adjacency instances, either in summary or detailed format.

Syntax show mpls rsvp hello instance [*detail*] [*peerAddress*] [*filter*]

- *detail*—Displays the contents of a specific adjacency instance or of all adjacency instances
- *peerAddress*—IP address of an RSVP-TE hello adjacency peer
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.3.0.

show mpls tunnels

Description Displays status and configuration for all tunnels or for a specific tunnel in the current router context.

Syntax `show mpls [traffic-eng] tunnels [name tunnelName]
[role { all | head | tail | middle | remote } | up | down]
[source-id sourceAddress [srcId]] [destination destAddr]
[interface interfaceType interfaceSpecifier] [brief | count-only] [filter]`

- *traffic-eng*—Specifies optional keyword for compatibility with non-E-series implementations
- *tunnelName*—Name of tunnel or minor interface to be displayed
- *role*—Displays tunnels in which the router has a specified role:
 - *all*—Displays all tunnels of which the router is a part
 - *head*—Displays tunnels where the router is the ingress router, or tunnel headend
 - *tail*—Displays tunnels where router is the egress router, or tunnel tailend (endpoint or destination of the tunnel)
 - *middle*—Displays tunnels where router is a transit router on the tunnel
 - *remote*—Displays tunnels where router is a transit router or egress router (tailend)
- *up*—Displays tunnels that are up
- *down*—Displays tunnels that are down
- *sourceAddress*—Source address of tunnels to be displayed
- *srcId*—Local ID associated with source address of tunnels to be displayed, an integer in the range 0–65535
- *destAddress*—Destination address of tunnels to be displayed
- *interface*—Displays information for the specified interface
 - *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *brief*—Displays only brief or summary information about the tunnels
- *count-only*—Displays a count for entries that match the specified conditions
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show mroute port count

Description Displays the mroute port outgoing interface limits and counts.

Syntax show mroute port [*portNumber*] count [*filter*]

- *portNumber*—Port number (in the form *slot/port*) for which you want to display information; if you omit the port number, the router displays information for all ports belonging to the bridge group
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show multicast group limit

Description Displays the number of IGMP or MLD groups associated with a port, and if configured, the maximum number of groups that a port can accept.

Syntax show multicast group limit [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show nbma arp

Description Displays ARP table entries for NBMA interfaces.

Syntax show nbma arp [*interfaceType interfaceSpecifier*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ntp associations

Description Displays information about NTP servers.

Syntax `show ntp associations [detail] [filter]`

- `detail`—Provides expanded information about the ntp servers, rather than a summary
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ntp status

Description Displays the NTP configuration and status for the router.

Syntax `show ntp status [filter]`

- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show nvs

Description Displays information about NVS.

Syntax `show nvs [filter]`

- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show parent-group

Description Displays information about an external parent group. If you do not provide a parent group name, displays all parent groups.

Syntax `show parent-group name parentGroup [brief] [filter]`

- `parentGroup`—Name of parent group
- `brief`—Displays information in a condensed format
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.0.0.

Related Topics

- Monitoring External Parent Groups

show policy-list

Description Displays information about policy lists.

Syntax show policy-list [*policyName* [precedence *precValue* [rule *ruleNumber*]]]
[brief] [*filter*]

- *policyName*—Name of policy
- *precValue*—Precedence for policy rule
- *ruleNumber*—Number of policy rule
- brief—Displays information in a condensed format
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Policy Lists

show policy-parameter

Description Displays information about a policy parameter. If you do not provide a parameter name, displays all parameters.

Syntax show policy-parameter [*parameterName*] [brief] [*filter*]

- *parameterName*—Name of parameter
- brief—Displays information in a condensed format
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.0.0.

Related Topics

- Monitoring Policy List Parameters

show ppp interface

Description Displays information about the PPP interface type that you specify.

Syntax `show ppp interface [interfaceType interfaceSpecifier]
[full | { dataRestriction }* [protocolRestriction]*] [state stateRestriction]
[delta] [filter]`

For multilinked PPP interfaces, the following options are additionally available:

`show ppp interface mppp [interfaceSpecifier] members [filter]`

`show ppp interface mppp links [filter]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *full*—Displays configuration, status, and statistics information for the interface, including information specific to LCP, IPCP, OSINLCP, MPLSCP, PAP, and CHAP; equivalent to specifying **config status statistics**
- *dataRestriction*—One or more of the following keywords; you can repeat a keyword without effect
 - *config*—Displays information about the PPP interface configuration
 - *status*—Displays information about the PPP interface operational status
 - *statistics*—Displays information about the PPP interface statistics
- ***—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *protocolRestriction*—One or more of the following keywords
 - *eap*—Displays EAP-specific information
 - *lcp*—Displays LCP-specific information
 - *ip*—Displays IPCP-specific information
 - *ipv6*—Displays IPv6CP-specific information
 - *osi*—Displays OSINLCP-specific information
 - *mpls*—Displays MPLSCP-specific information
 - *pap*—Displays PAP-specific information
 - *chap*—Displays CHAP-specific information
- *stateRestriction*—Information is displayed only for interfaces in one of the following specified states:
 - *open*—Interface is administratively enabled, meaning that the **no ppp shutdown** command is operational
 - *closed*—Interface is administratively disabled, meaning that the **ppp shutdown** command is operational
 - *up*—Interface on which the LCP has been negotiated

- down—Interface on which the LCP has not been negotiated, the negotiations have failed, or the connection has been ended
- lower-layer-down—Interface that is not up and is waiting for the lower layer to come up to initiate negotiations for LCP
- not-present—Interface that is not present because the hardware is not available. When the interface is in this state, no detailed information is available.
- passive—Interface with the operational status passive
- tunneled—Tunneled PPP interfaces
- no-ip—Interface on which IPCP is not configured
- ip-open—Interface on which IPCP is administratively enabled, meaning that the **no ppp shutdown ip** command is operational
- ip-closed—Interface on which IPCP is administratively disabled, meaning that the **ppp shutdown ip** command is operational
- ip-up—Interface on which the IPCP has been negotiated
- ip-down—Interface on which the IPCP has not been negotiated, the negotiations failed, or the connection has been ended
- no-ipv6—Interface on which IPv6CP is not configured
- ipv6-open—Interface on which IPv6CP is administratively enabled, meaning that the **no ppp shutdown ipv6** command is operational
- ipv6-closed—Interface on which IPv6CP is administratively disabled, meaning that the **ppp shutdown ipv6** command is operational
- ipv6-up—Interface on which the IPv6CP has been negotiated
- ipv6-down—Interface on which the IPv6CP has not been negotiated, the negotiations failed, or the connection has been ended
- no-osi—Interface on which OSINLCP is not configured
- osi-open—Interface on which OSINLCP is administratively enabled, meaning that the **no ppp shutdown osi** command is operational
- osi-closed—Interface on which OSINLCP is administratively disabled, meaning that the **ppp shutdown osi** command is operational
- osi-up—Interface on which the OSINLCP has been negotiated
- osi-down—Interface on which the OSINLCP has not been negotiated, the negotiations failed, or the connection has been ended
- no-mpls—Interface on which MPLSCP is not configured
- mpls-open—Interface on which MPLSCP is administratively enabled, meaning that the **no ppp shutdown mpls** command is operational
- mpls-closed—Interface on which MPLSCP is administratively disabled, meaning that the **ppp shutdown mpls** command is operational
- mpls-up—Interface on which the MPLSCP has been negotiated
- mpls-down—Interface on which the MPLSCP has not been negotiated, the negotiations failed, or the connection has been ended
- delta—Displays baselined statistics

- *filter*—See *Filtering show Commands* in *About This Guide*
- *members*—Lists all MLPPP member links, or only those for a specified MLPPP bundle
- *links*—Lists all MLPPP encapsulated links, regardless of whether the links are members of an MLPPP bundle

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
eap keyword added in JUNOS Release 7.3.0.

show ppp interface summary

Description Displays a summary of all nonmultilinked and multilinked PPP interfaces configured on the router.

Syntax show ppp interface summary [config | admin | oper] [*filter*]

- *config*—Displays summary information about PPP configuration status
- *admin*—Displays summary information about PPP administration status
- *oper*—Displays summary information about PPP operational status
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show pppoe interface

- Description** Displays information about the PPPoE interface you specify. Use the **summary** keyword to display information for all configured PPPoE interfaces.
- Syntax** show pppoe interface [*interfaceType interfaceSpecifier*] [*delta*] [*filter*]
show pppoe interface [*full*] [*summary*]
- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - atm
 - fastEthernet
 - gigabitEthernet
 - lag
 - serial—PPPoE is not currently supported on serial interfaces
 - tenGigabitEthernet
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *delta*—Displays baselined statistics
 - *filter*—See *Filtering show Commands* in *About This Guide*
 - *full*—Displays configuration, status, and statistics information
 - *summary*—Displays administrative and operational status of all configured PPPoE interfaces
- Mode** Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show pppoe interface lockout-time

- Description** In configurations with dynamic PPPoE subinterfaces over static PPPoE major interfaces, displays detailed information about the current encapsulation type lockout condition for each PPPoE client associated with the dynamic PPPoE subinterface column.
- Syntax** show pppoe interface [*interfaceType interfaceSpecifier*] lockout-time [*filter*]
- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - atm
 - fastEthernet
 - gigabitEthernet
 - lag
 - serial—PPPoE is not currently supported on serial interfaces
 - tenGigabitEthernet
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced in JUNOS Release 7.2.0.

show pppoe-service-name-table

- Description** Displays the contents of the specified PPPoE service name table.
- Syntax** show pppoe-service-name-table { *brief* | *name tableName* } [*filter*]
- *brief*—Displays the names of all PPPoE service name tables configured on the router
 - *tableName*—Name of the PPPoE service name table; string of up to 32 alphanumeric characters
 - *filter*—See *Filtering show Commands* in *About This Guide*
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show pppoe subinterface

- Description** Displays all available data for a specific PPPoE subinterface. Use the **summary** keyword to display information for all configured PPPoE subinterfaces.
- Syntax** show pppoe subinterface [*interfaceType interfaceSpecifier*] [*delta*] [*filter*]
show pppoe subinterface [*full*] [*summary*] [*filter*]
- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - atm
 - fastEthernet
 - gigabitEthernet
 - lag
 - serial—PPPoE is not currently supported on serial interfaces
 - tenGigabitEthernet
 - *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
 - *delta*—Displays baselined statistics
 - *filter*—See *Filtering show Commands* in *About This Guide*
 - *full*—Displays configuration, status, and statistics information
 - *summary*—Displays administrative and operational status of all configured PPPoE subinterfaces
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show privilege

- Description** Displays the privilege level of the current user.
- Syntax** show privilege
- Mode** Privileged Exec, User Exec
- Release Information** Command introduced before JUNOS Release 7.1.0.

show privilege group

Description Displays information for all privilege groups or for the specified privilege group.

Syntax show privilege group *privilegeGroupName*

- *privilegeGroupName*—Name of the privilege group

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.0.0.

show processes cpu

Description Displays CPU resources used by system processes.

Syntax show processes [*cpu*] [*filter*]

- *cpu*—Displays CPU use; default display if you omit any keyword
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show processes memory

Description	Displays the amount of memory-related resources used by system processes. Because the router allocates memory to system processes in chunks, issuing this command performs a cleanup process to gather unused, available memory for reallocation.
Syntax	<pre>show processes memory [detail] [filter]</pre> <pre>show processes memory [slot { slotNumber all }] application [applicationName [virtual-router [virtualRouterName [:vrfName]]]] [detail] [filter]</pre> <pre>show processes memory [slot { slotNumber all }] virtual-router [virtualRouterName [:vrfName] [application [applicationName]]] [detail] [filter]</pre> <pre>show processes memory slot { slotNumber all } detail</pre> <ul style="list-style-type: none">■ detail—Displays detailed system memory listing■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>■ slot slotNumber—Displays memory usage for just the controller in the specified slot■ slot all—Displays memory usage for all slot controllers■ application—Displays system memory usage on a per-application basis■ applicationName—Name of the application for which you want to view system memory usage■ virtual-router—Displays memory usage for all virtual routers on a per-router basis■ virtual-router virtualRouterName—Displays memory usage for each data store associated with the specified router■ vrfName—Name of the VRF (note the use of the colon before you specify a VRF name)
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show profile

Description	Displays information about a specific IP profile, such as the available PPPoE profile information: PPPoE URL string, PPPoE MOTM string, or both. If neither exists, the fields do not appear in the display.
Syntax	<pre>show profile name profileName [filter]</pre> <ul style="list-style-type: none">■ profileName—Name of the profile■ filter—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show profile brief

Description Displays the names of all IP profiles.

Syntax show profile brief [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show qos interface-hierarchy

Description Displays information about the router's QoS interface hierarchy.

Syntax To display the interface hierarchy for interfaces:
 show qos interface-hierarchy interface *interfaceType* *interfaceSpecifier* [*atmVpi* | *s-vlanIdValue*] [*filter*]

To display the interface hierarchy for L2TP sessions:
 show qos interface-hierarchy l2tp session *sessionName* [*filter*]

To display the interface hierarchy for tunnel-service interfaces:
 show qos interface-hierarchy tunnel-server *interfaceSpecifier* [*filter*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *sessionName* —Name of the L2TP session
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
atmVpi and *s-vlanIdValue* variables added in JUNOS Release 7.1.0.

Related Topics

- Monitoring the QoS Profiles Attached to an Interface

show qos-parameter

Description Displays QoS parameter instance settings for QoS clients.

Syntax To display settings for a specific parameter instance with references:
`show qos-parameter [qosParameterInstanceName] references [brief | full] [filter]`

To display references globally:
`show qos-parameter [qosParameterInstanceName] references global [qosParameterInstanceName] [brief | full] [filter]`

To display references for interfaces:
`show qos-parameter [qosParameterInstanceName] references [interface interfaceType interfaceSpecifier [atmVpi | s-vlanIdValue]] [explicit] [brief | full] [filter]`

To display references for L2TP sessions:
`show qos-parameter [qosParameterInstanceName] references lt2p session sessionName [explicit] [filter]`

- *qosParameterInstanceName*—Name of the parameter instance
- *references*—Displays interfaces that reference this parameter instance
- *global*—Displays information about global parameter instances
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *sessionName* —Name of the L2TP session
- *brief*—Displays information in a condensed format
- *full*—Displays information in expanded format
- *explicit*—Displays parameter instances only on the specified interface and not parameter instances stacked above the interface
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.
full keyword added in JUNOS Release 7.2.0.

Related Topics

- Monitoring QoS Parameter Instances

show qos-parameter-define

Description Displays QoS parameter definition settings for QoS administrators.

Syntax show qos-parameter-define [*qosParameterDefinitionName*] [brief | references] [*filter*]

- *qosParameterDefinitionName*—Name of the parameter definition
- brief—Displays information in a condensed format
- references—Display references to this parameter definition
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- Monitoring QoS Parameter Definitions

show qos-port-type-profile

Description Displays information about the QoS port-type profile for particular interface type.

Syntax show qos-port-type-profile [*typeOfInterface*] [*filter*]

- *typeOfInterface*—One of the following interface types to be associated with the QoS port-type profile: atm, ethernet, lag, serial, server-port
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
lag option added in JUNOS Release 8.1.0.

Related Topics

- Monitoring the Configuration of QoS Port-Type Profiles

show qos-profile

Description Displays information about QoS profiles configured on the router. Use the **references** keyword to display information about QoS profiles attached to an interface, L2TP session, or tunnel-service interface.

Syntax To display information about all QoS profiles or a specific QoS profile:
`show qos-profile [qosProfileName] [brief] [filter]`

To display information about the QoS profiles attached to a specific interface:
`show qos-profile references interface interfaceType interfaceSpecifier [atmVpi | s-vlanIdValue] [explicit] [brief] [filter]`

To display information about the QoS profiles attached to a specific L2TP session:
`show qos-profile references lt2p session sessionName [explicit] [brief] [filter]`

To display information about the QoS profiles attached to a specific tunnel-service interface:
`show qos-profile references tunnel-server interfaceType [explicit] [brief] [filter]`

- *qosProfileName*—Name of the QoS profile
- *references*—Displays interface profiles that reference this profile
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *sessionName* —Name of the L2TP session
- *explicit*—Displays attachments for QoS profiles only on the specified interface and not QoS profiles stacked above the interface
- *brief*—Displays information in a condensed format
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
references keyword added in JUNOS Release 7.1.0.

Related Topics

- Monitoring the Configuration of QoS Profiles

show qos queue-thresholds

Description Displays the color-based thresholds for queues on each egress slot.

Displaying queue thresholds by queue profile shows buffer memory information by queue profile, and, within that profile, shows the thresholds for each region.

Displaying queue thresholds by region organizes the buffer memory information by queue region, and, within each region, shows the buffer allocations for each queue profile.

Syntax `show qos queue-thresholds egress-slot egressSlot
[queue-profile [queueProfileName]] [region [regionNumber]] [filter]`

- `queue-thresholds`—Displays color-based thresholds for queues on an egress slot
- `egressSlot`—Displays color-based thresholds for an egress slot
- `queue-profile`—Displays thresholds for each region of the queue profile
- `queueProfileName`—Name of the queue profile
- `region`—Displays egress memory or buffer region oversubscription
- `regionNumber`—Number identifying the egress memory or buffer region on the line module
- `filter`—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Monitoring Queue Thresholds](#)

show qos scheduler-hierarchy

Description Displays information about the scheduler hierarchy on a specified interface, L2TP session, or tunnel-service interface.

Syntax To display information about the scheduler hierarchy on a specified interface:
`show qos scheduler-hierarchy interfaceType interfaceSpecifier`
`[atmVpi | s-vlanIdValue] [explicit | level levelNumber]`
`[traffic-class-group { trafficClassGroupName | default }] [brief | full | summary] [filter]`

To display information about the scheduler hierarchy on a specified tunnel-service interface:

`show qos scheduler-hierarchy tunnel-server interfaceType [explicit | level levelNumber]`
`[traffic-class-group { trafficClassGroupName | default }] [brief | full | summary] [filter]`

To display information about the scheduler hierarchy on a specified L2TP session:
`show qos scheduler-hierarchy lt2p session sessionName [explicit | level levelNumber]`
`[traffic-class-group { trafficClassGroupName | default }] [brief | full | summary] [filter]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *atmVpi*—Virtual path identifier of this PVC; number in the range 0–255
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *explicit*—Displays scheduler profiles for the specified interface rather than those stacked above the interface
- *levelNumber*—Number of scheduler levels above specified interface to report; 0 indicates the specified interface
- *trafficClassGroupName*—Name of the traffic-class group for which to display the scheduler hierarchy
- *sessionName* —Name of the L2TP session
- *default*—Displays the scheduler hierarchy of the default traffic-class group
- *brief*—Displays information in condensed format
- *full*—Displays information in expanded format
- *summary*—Displays summary of scheduler profiles stacked above the specified interface
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- Monitoring the QoS Scheduler Hierarchy

show qos shared-shaper

Description	Displays information about shared shapers for an interface, L2TP session, or tunnel-service interface.
Syntax	<p>To display information about shared shapers for a specified interface:</p> <pre>show qos shared-shaper interface <i>interfaceType</i> <i>interfaceSpecifier</i> [<i>atmVpi</i> <i>s-vlanIdValue</i>] [<i>summary</i>] [<i>explicit</i>] [<i>brief</i> <i>full</i>] [<i>filter</i>]</pre> <p>To display information about shared shapers on an L2TP session:</p> <pre>show qos shared-shaper lt2p session <i>sessionName</i> [<i>summary</i>] [<i>explicit</i>] [<i>brief</i> <i>full</i>] [<i>filter</i>]</pre> <p>To display information about shared shapers on a tunnel-service interface:</p> <pre>show qos shared-shaper tunnel-server <i>interfaceType</i> [<i>summary</i>] [<i>explicit</i>] [<i>brief</i> <i>full</i>] [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>interfaceType</i>—Interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>interfaceSpecifier</i>—Particular interface; format varies according to interface type; see <i>Interface Types and Specifiers</i> in <i>About This Guide</i> ■ <i>atmVpi</i>—Virtual path identifier of this PVC; number in the range 0–255 ■ <i>s-vlanIdValue</i>—S-VLAN ID number in the range 0–4095 ■ <i>sessionName</i> —Name of the L2TP session ■ <i>summary</i>—Displays summary of shared shapers stacked above the specified interface ■ <i>explicit</i>—Displays shared shapers for the specified interface rather than those stacked above the interface ■ <i>brief</i>—Displays information in condensed format ■ <i>full</i>—Displays information in expanded format ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0. <i>atmVpi</i> and <i>s-vlanIdValue</i> variables added in JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring Shared Shapers

show qos-shared-shaper-control

Description	Displays information about the user-configurable variables for controlling the simple shared shaper algorithm.
Syntax	show qos-shared-shaper-control
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 8.0.0.
Related Topics	<ul style="list-style-type: none"> ■ Monitoring Shared Shaper Algorithm Variables

show queue-profile

Description Displays information about queue profiles configured on the E-series router.

Syntax show queue-profile [*queueProfileName*] [brief | references] [*filter*]

- *queueProfileName*—Name of the queue profile
- brief—Displays information in a condensed format
- references—Displays QoS profiles that reference this profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Queue Profiles

show radius acct-session-id-format

Description Displays RADIUS Acct-Session-Id format used for RADIUS attribute 44, Acct-Session-Id.

Syntax show radius acct-session-id-format [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius algorithm

Description Displays the RADIUS algorithm that the RADIUS servers use.

Syntax show radius algorithm [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius attributes-ignored

Description Displays whether the RADIUS server accepts or ignores RADIUS attributes in Access-Accept messages. See the **radius ignore** command.

Syntax show radius attributes-ignored [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius attributes-included

Description Displays the RADIUS attributes that are included in and excluded from Access-Request, Acct-Start, and Acct-Stop messages. You configure attribute inclusion using the **radius include** commands.

Syntax show radius attributes-included [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius calling-station-delimiter

Description Displays the delimiter used in RADIUS attribute 30, Calling-Station-Id, for the authenticated ATM PPP users.

Syntax show radius calling-station-delimiter [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius calling-station-format

Description Displays the format of RADIUS attribute 31, Calling-Station-Id.

Syntax show radius calling-station-format [*filter*]

- *filter*—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius connect-info-format

Description Displays the format of RADIUS attribute 77, Connect-Info.

Syntax show radius connect-info-format [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius dsl-port-type

Description Displays the DSL port type used in RADIUS attribute 61, NAS-Port-Type, for ATM users.

Syntax show radius dsl-port-type [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius ethernet-port-type

Description Display RADIUS attribute 61, NAS-Port-Type, for Ethernet interfaces.

Syntax show radius ethernet-port-type [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius nas-identifier

Description Displays the RADIUS client's value for RADIUS attribute 32, NAS-Identifier.

Syntax show radius nas-identifier [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius nas-port-format

Description Displays the format used for RADIUS attribute 5, NAS-Port.

Syntax show radius nas-port-format [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius nas-port-format extended

Description Displays the format used for RADIUS attribute 5, NAS-Port, on the E120 router and the E320 router.

Syntax show radius nas-port-format extended { atm | ethernet } [*filter*]

- atm—Displays information about ATM interfaces
- ethernet—Displays information about Gigabit Ethernet and 10-Gigabit Ethernet interfaces
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show radius override

Description Displays the current override settings configured on the RADIUS client (LNS) for the NAS-IP-Address [4], NAS-Port-Id [87], Calling-Station-Id [31], and NAS-Identifier [32] RADIUS attributes. The nas-info field in the command output indicates the virtual router that generates the NAS-IP-Address and NAS-Identifier attributes for AAA broadcast accounting packets.

Syntax show radius override [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius pppoe nas-port-format

Description Displays the configuration of the NAS-Port-Format for PPPoE subscribers.

Syntax show radius pppoe nas-port-format [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius relay

Description Displays information about RADIUS relay authentication and accounting servers.

Syntax show radius relay [authentication | accounting]
{ servers | statistics [*ipAddress*] [delta] } [*filter*]

- authentication—Displays authentication information only
- accounting—Displays accounting information only
- servers—Displays a list of authentication and/or accounting servers
- statistics—Displays authentication and/or accounting statistics
- *ipAddress*—Address of a RADIUS relay client for which statistics are displayed
- delta—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius relay udp-checksum

Description Displays information about RADIUS relay UDP checksums.

Syntax show radius relay udp-checksum [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius remote-circuit-id-delimiter

Description Displays the delimiter character that the router uses to set off components in the PPPoE remote circuit ID value sent from a DSLAM and captured on the router. The default delimiter character is #.

Syntax show radius remote-circuit-id-delimiter

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius remote-circuit-id-format

Description Displays the format of the PPPoE remote circuit ID value sent from a DSLAM and captured on the router.

If the PPPoE remote circuit ID value is configured to include any or all of the agent-circuit-id, agent-remote-id, and nas-identifier components, the display lists the components included and the order in which they appear.

If the PPPoE remote circuit ID value is configured to use the format for the **dsl-forum-1** keyword of the **radius remote-circuit-id-format** command, the display indicates that this format is in effect.

Syntax show radius remote-circuit-id-format

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius rollover-on-reject

Description Displays the configuration of the rollover-on-reject feature.

Syntax show radius rollover-on-reject [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius servers

Description Displays information about the RADIUS servers configured on the router.

Syntax show radius [*serverType*] servers [*filter*]

- *serverType*—One of the following RADIUS server types:
 - authentication—Displays authentication information only
 - accounting—Displays accounting information only
 - dynamic-request—Displays dynamic-request information only
 - pre-authentication—Displays preauthentication information only
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
pre-authentication keyword added in JUNOS Release 8.1.0.

Related Topics

- Monitoring RADIUS Dynamic-Request Server Information

show radius statistics

Description Displays statistics for the RADIUS servers configured on the router.

Syntax show radius [*serverType*] statistics [*delta*] [*filter*]

- *serverType*—One of the following RADIUS server types:
 - authentication—Displays authentication statistics only
 - accounting—Displays accounting statistics only
 - dynamic-request—Displays dynamic-request statistics only
 - pre-authentication—Displays preauthentication statistics only
- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
pre-authentication keyword added in JUNOS Release 8.1.0.

Related Topics

- Monitoring RADIUS Dynamic-Request Server Information

show radius trap

Description Displays the configuration of RADIUS SNMP traps.

Syntax show radius trap [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius tunnel-accounting

Description Displays information about RADIUS accounting for L2TP tunnels.

Syntax show radius tunnel-accounting [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius udp-checksum

Description Displays information about UDP checksums.

Syntax show radius udp-checksum [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius update-source-addr

Description Displays the IP source address of the RADIUS client.

Syntax show radius update-source-addr [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show radius vlan nas-port-format

Description Displays whether the S-VLAN ID is included in RADIUS attribute 5, NAS-Port.

Syntax show radius vlan nas-port-format [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rate-limit-profile

Description Displays information about rate-limit profiles.

Syntax show rate-limit-profile [*rateLimitProfileName*] [*filter*]

- *rateLimitProfileName*—Name of a rate-limit profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Rate-Limit Profiles

show reboot-history

Description Displays information about the reboot history of the router.

Syntax show reboot-history [*fileName.nty*] [*filter*]

- *fileName*—Name of a history file to display; if not specified, displays the current reboot.nty file
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy

Description Displays the supported redundancy modes as well as other status relating to high availability. In particular, the output indicates any conditions that are preventing the operational mode from being high availability.

Syntax show redundancy [*brief | detail*] [*filter*]

- *brief*—Displays summary redundancy information for line modules, SRP modules, or both
- *detail*—Displays detailed information for line modules, SRP modules, or both
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy clients

Description Displays high availability clients and their various levels of high availability support.

Syntax show redundancy clients [*all | supported | unsafe | unsupported*] [*filter*]

- *all*—Displays all clients registered with high availability
- *supported*—Displays only clients that are supported by high availability
- *unsafe*—Displays only clients with an unsafe high availability state
- *unsupported*—Displays only clients that are not supported by high availability.
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy history

Description Displays information about dates, times, and the number of occurrences for starts and switchovers.

Syntax show redundancy history [*srp*] [*detail*] [*filter*]

- *srp*—Displays history information specific to the SRP modules
- *detail*—Displays detailed history information
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy line-card

Description Displays redundancy information specific to line modules.

Syntax show redundancy line-card [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy srp

Description Displays redundancy information specific to SRP modules.

Syntax show redundancy srp [*brief* | *detail*] [*filter*]

- *brief*—Displays summary redundancy information for SRP modules
- *detail*—Displays detailed information for SRP modules
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show redundancy switchover-history

Description Displays the high availability switchover history for the router.

Syntax show redundancy switchover-history [*srp*] [*filter*]

- *srp*—Displays history information specific to the SRP modules
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show reload

Description Displays the reload status on the router.

Syntax show reload [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show resource

Description Displays statistical information about resources and their current threshold configurations.

Syntax show resource [[if-type { atm-active-sub-if | atm-sub-if | atm-vc | ip | ppp-link } [system | slot *slot*]] [threshold [trap [status]]]

- if-type—Indicates interface type; see *Interface Types and Specifiers* in *About This Guide*
- atm-active-sub-if—Active ATM subinterfaces
- atm-sub-if—Both active and inactive ATM subinterfaces
- atm-vc—ATM virtual circuits
- ip—IP interfaces
- ppp-link—PPP link interfaces
- system—All slots on the system
- *slot*—Number of the chassis slot in the range 0–2 (ERX-310 model), 0–6 (ERX-7xx models), and 0–13 (ERX-14xx models)
- threshold—Displays threshold information (optional keyword when used alone)
- trap—Displays threshold trap status
- status—Displays threshold trap status (optional keyword)

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show route-map

Description Displays all the route maps or the route map you specify. The default is all route maps.

Syntax show route-map [*listName*] [*filter*]

- *listName*—Name of a route map
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr application

Description Displays RTR application information.

Syntax show rtr application [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr collection-statistics

Description Displays RTR collection information.

Syntax show rtr collection-statistics [*rtrIndex*] [*filter*]

- *rtrIndex*—Number of the operation
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr configuration

Description Displays the configuration for all RTR entries or for a specified entry.

Syntax show rtr configuration [*rtrIndex*] [*filter*]

- *rtrIndex*—Number of the operation
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr history

Description Displays the history collected for all RTR entries or for a specified entry.

Syntax show rtr history [*rtrIndex*] [*filter*]

- *rtrIndex*—Number of the operation
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr hops

Description Displays information discovered on each of the hops.

Syntax show rtr hops [*rtrIndex*] [*filter*]

- *rtrIndex*—Number of the operation
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show rtr operational-state

Description Displays the operational state for all RTR entries or for a specified entry.

Syntax show rtr operational-state [*rtrIndex*] [*filter*]

- *rtrIndex*—Number of the operation
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show running-configuration

Description Displays the configuration currently running on the router, a specified virtual router, a specified interface, or a specified category of router settings. Available only if the router is in Manual Commit mode (configuration changes affect only the current system configuration).

Syntax `show running-configuration [interface interfaceType interfaceSpecifier] | [category categoryName [categoryName]*] [virtual-router routerName] [[exclude-category interface interfaceType]*] [include-defaults] [filter]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *categoryName*—Name of the category or subcategory of router settings; first *categoryName* variable in the syntax represents the category; repeated *categoryName* variables represent subcategories of the category
- *routerName*—Name of the virtual router
- exclude-category—Excludes information associated with a particular type of interface
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- include-defaults—Includes commands that set default values for various parameters
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show scheduler-profile

Description Displays information about scheduler profiles configured on the E-series router.

Syntax `show scheduler-profile [schedulerProfileName] [brief | references] [filter]`

- *schedulerProfileName*—Name of the scheduler profile
- brief—Displays information in a condensed format
- references—Displays QoS profiles that reference this profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring the Configuration of Scheduler Profiles

show secrets

Description Displays passwords and secrets.

Syntax show secrets [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show secure classifier-list

Description Displays information about secure classifier lists.

Syntax show secure classifier-list [*classifierName* [*classifierNumber*]] [brief | detailed] [*filter*]
■ *classifierName*—Name of the secure classifier list
■ *classifierNumber*—Number of the classifier list
■ brief—Displays information in a condensed, summary format
■ detailed—Provides a detailed description of the trace, rather than a summary
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 8.0.0.

Related Topics

- Monitoring Secure CLACL Configurations

show secure policy-list

Description Displays information about the secure policy lists that are configured for packet mirroring.

Syntax show secure policy-list [name *policyName*] [brief] [*filter*]
■ *policyName*—Name of the secure policy-list
■ brief—Displays information in a condensed format
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Secure Policy Lists

show service-management owner-session

Description	Displays subscriber session information based on the session owner.
Syntax	<pre>show service-management owner-session { brief <i>subscriberId</i> ownerName <i>ownerId</i> [service-session <i>serviceName</i>] } [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>brief</i>—Displays limited information about the owner sessions ■ <i>subscriberId</i>—ID of the subscriber ■ <i>ownerName</i>—Name of the owner for the owner session; AAA for RADIUS-based subscribers ■ <i>ownerId</i>—Unique ID of the owner for the owner session; Acct-Session-ID for RADIUS-based subscribers ■ <i>serviceName</i>—Name of the service session used for the owner session ■ <i>filter</i>—See <i>Filtering show Commands in About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 8.0.0.

show service-management service-definition

Description	Displays information for all service definitions or for the specified service definition.
Syntax	<pre>show service-management service-definition { <i>fileName</i>.mac brief } [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>fileName</i>—Name of the service definition macro file ■ <i>brief</i>—Displays limited information about the service definitions ■ <i>filter</i>—See <i>Filtering show Commands in About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.2.0.

show service-management service-session-profile

Description	Displays information for user sessions.
Syntax	<pre>show service-management service-session-profile { <i>profileName</i> brief } [<i>filter</i>]</pre> <ul style="list-style-type: none"> ■ <i>profileName</i>—Name of the service session profile ■ <i>brief</i>—Displays limited information about the user sessions ■ <i>filter</i>—See <i>Filtering show Commands in About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.2.0.

show service-management subscriber-session

Description Displays information for subscriber sessions.

Syntax show service-management subscriber-session { brief | *subscriberId* | *subscriberName* [interface *interfaceType* *interfaceSpecifier* [service-session *serviceName*]] } [*filter*]

- *brief*—Displays limited information about the user sessions
- *subscriberId*—ID of the subscriber
- *subscriberName*—Name of the subscriber
- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *serviceName*—Name of the service session used for the subscriber session
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show service-management summary

Description Displays summary information for all subscriber and service sessions.

Syntax show service-management summary [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

show snmp

Description Displays information about the status of communications between the SNMP agent and the SNMP manager.

Syntax show snmp [delta] [*filter*]

- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp access

Description	Displays information about the groups you configured.
Syntax	<pre>show snmp access [storage] [filter]</pre> <ul style="list-style-type: none"> ■ <i>storage</i>—Displays SNMP storage information ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0. storage keyword added in JUNOS Release 7.2.0.

show snmp agent

Description	Displays information about the SNMP MIB agent.
Syntax	<pre>show snmp agent [filter]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show snmp community

Description	Displays information about configured communities.
Syntax	<pre>show snmp community [filter]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show snmp group

Description	Displays the list of available groups (dynamic and static). Detailed information is available through the show snmp access command.
Syntax	<pre>show snmp group [filter]</pre> <ul style="list-style-type: none"> ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.1.0.

show snmp interfaces

Description Displays the configuration of the SNMP interface tables.

Syntax show snmp interfaces [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp management-event

Description Displays statistical SNMP event information for event table entries, router resources, and trigger table entries.

Syntax show snmp management-event [events | resource | triggers | statistics [error | event] [trigger *triggerOwner triggerName*] [*filter*]
■ events—Displays event table entries
■ resource—Displays resource information
■ triggers—Displays trigger table entries
■ statistics—Displays statistical information
■ error—Displays error statistics
■ event—Displays event statistics
■ *triggerOwner*—Owner of trigger for which statistics are displayed; string of up to 32 alphanumeric characters
■ *triggerName*—Name of trigger for which statistics are displayed; string of up to 32 alphanumeric characters
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp notificationLog

Description Displays the configuration of the SNMP notification log.

Syntax show snmp notificationLog [*filter*]
■ *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp secure-log

Description Displays the contents of the SNMP secure audit log.

Syntax show snmp secure-log [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.0.0.

Related Topics

- Monitoring SNMP Secure Audit Logs

show snmp trap

Description Displays information about configured traps and trap destinations.

Syntax show snmp trap [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring SNMP Secure Packet Mirroring Traps

show snmp trap statistics

Description Displays statistics on SNMP traps sent and received on the router.

Syntax show snmp trap statistics [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp user

Description Displays information about users.

Syntax show snmp user [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show snmp view

Description Displays information about the views you created.

Syntax show snmp view [storage] [filter]

- storage—Displays SNMP storage information
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show socket statistics

Description Displays BSD socket-emulation statistics.

Syntax show socket statistics [detailed] [filter]

- detailed—Displays detailed statistics for each TCP socket
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ssc info

Description Displays information about SDX (formerly SSC) servers and SDX client (formerly SSCC) statistics.

Syntax show ssc info [brief] [filter]

- brief—Displays abbreviated SDX client and server information
- filter—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show ssc statistics

Description Displays statistics about SDX (formerly SSC) servers and SDX client (formerly SSCC) statistics.

Syntax show ssc statistics [*delta*] [*filter*]

- *delta*—Displays baselined statistics
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.

show ssc version

Description Displays the SDX client (formerly SSCC) version number.

Syntax show ssc version [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show statistics-profile

Description Displays information about statistics profiles configured on the E-series router.

Syntax show statistics-profile [*statisticsProfileName*] [*brief* | *references*] [*filter*]

- *statisticsProfileName*—Name of the statistics profile
- *brief*—Displays information in a condensed format
- *references*—Displays QoS profiles that reference this profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Monitoring the Configuration of Statistics Profiles](#)

show statistics tacacs

Description Displays TACACS + server or TACACS + statistics information.

Syntax show statistics tacacs [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show subscriber-policy

Description Displays the set of forwarding (permit) and filtering (deny) rules for all subscriber policies configured on the router, or for a specified subscriber policy. If you omit the policy name, the router displays information about the default subscriber (client) policy, the default trunk (server) policy, and any nondefault subscriber policies that are configured for a subscriber interface associated with a bridge group or VPLS instance.

Syntax show subscriber-policy [*subscriberPolicyName*] [*filter*]

- *subscriberPolicyName*—Name of the subscriber policy specified with the **subscriber-policy** command
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Subscriber Policy Rules

show subscribers

Description Displays the active subscribers on your router.

Syntax To display detailed information:
 show subscribers [ipv6 [*ipv6Prefix*]]
 [domain *domainName* | interface { atm | ethernet } *interfaceSpecifier* |
 port *interfaceSpecifier* | slot *slotNumber* | username *userName* | virtual-router *vrName*]
 [*filter*]

To display summary information:

show subscribers summary [domain | interface | port | slot | virtual-router] [*filter*]

- *ipv6*—Displays IPv6 subscribers for the domain
- *ipv6Prefix*—Prefix that defines the IPv6 network that you want to filter
- *userName*—Username of active subscriber
- *domain*—Displays active subscribers for the domain
- *domainName*—Domain name matching usernames of active subscribers
- *interface*—Displays active subscribers for the specified interface, **atm** or **ethernet**, or in the **summary** version, displays active subscribers for all ATM and Ethernet interfaces
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *port*—Displays active subscribers for the port
- *slot*—Displays active subscribers for the slot
- *slotNumber*—Number of the chassis slot of the line module in the range 0–2 (ERX-310 model), 0–6 (ERX-7xx models), 0–13 (ERX-14xx models), 0–5 (E120 router), and 0–16 (E320 router)
- *virtual-router*—Displays active subscribers for the VR
- *vrName*—Name of the VR to which interfaces of active subscribers are bound
- *filter*—See *Filtering show Commands* in *About This Guide*
- *summary*—Displays the active subscribers for each domain, interface, port, slot, or virtual router

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
interface, **atm**, and **ethernet** keywords added in JUNOS Release 7.3.0.
slot keyword and *slotNumber* variable added in JUNOS Release 7.3.0.

show subsystems

Description Displays the names of subsystem files in the current software release or in a specified release file.

Syntax show subsystems [file *fileName.rel*] [*filter*]

- *fileName*—Name of the software release file; you can specify a file on a remote server by including the path as part of the filename; absence of a path indicates a local file
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show suspicious-control-flow-detection counts

Description Displays statistics for the suspicious flow control detection system.

Syntax show suspicious-control-flow-detection counts [slot *slotNumber*] [delta] [*filter*]

- delta—Displays statistics for the current baseline
- *slotNumber*—Number of the slot
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.3.0.

show suspicious-control-flow-detection flows

Description Displays suspicious flows.

Syntax show suspicious-control-flow-detection flows [slot *slotNumber*] [*filter*]

- *slotNumber*—Number of the slot
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.3.0.

show suspicious-control-flow-detection info

Description	Displays information about the suspicious flow control detection system.
Syntax	<pre>show suspicious-control-flow-detection info [slot slotNumber] [brief] [delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>brief</i>—Displays only suspicious information ■ <i>delta</i>—Displays statistics for the current baseline ■ <i>slotNumber</i>—Number of the slot for which information is displayed ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.3.0.

show suspicious-control-flow-detection protocol

Description	Displays suspicious control flow information for a specific protocol. If no protocol is specified, information is displayed for all protocols.
Syntax	<pre>show suspicious-control-flow-detection protocol [protocolValue] [filter]</pre> <ul style="list-style-type: none"> ■ <i>protocolValue</i>—Name of the protocol ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced in JUNOS Release 7.3.0.

show tacacs

Description	Displays general or detailed TACACS+ information.
Syntax	<pre>show tacacs [statistics delta] [filter]</pre> <ul style="list-style-type: none"> ■ <i>statistics</i>—Specifies TACACS+ server statistics ■ <i>delta</i>—Displays baselined statistics ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show tcp ack-rst-and-syn

Description	Displays the status of TCP ACK, RST, and SYN protection.
Syntax	<pre>show [ip] tcp ack-rst-and-syn [vrf vrfName] [filter]</pre> <ul style="list-style-type: none"> ■ <i>vrfName</i>—Name of the VRF ■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0 <i>ip</i> keyword made optional in JUNOS Release 7.2.0.

show tcp path-mtu-discovery

Description Displays the path MTU information.

Syntax show [ip] tcp path-mtu-discovery [vrf *vrfName*]
■ *vrfName*—Name of the VRF

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0
ip keyword made optional in JUNOS Release 7.2.0.

show tcp paws

Description Displays TCP PAWS status information.

Syntax show [ip] tcp paws [vrf *vrfName*]
■ *vrfName*—Displays the PAWS information associated with a VRF

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0
ip keyword made optional in JUNOS Release 7.2.0.

show tcp resequence-buffers

Description Displays the configuration, current per-VR and per-router state of the TCP resequencing buffer management functions.

Syntax show [ip] tcp resequence-buffers [vrf *vrfName*]
■ *vrfName*—Name of the VRF

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0
ip keyword made optional in JUNOS Release 7.2.0.

show tcp statistics

Description Displays all TCP statistics or only IPv4 or IPv6 TCP statistics.



NOTE: Order is important when you enter options for this command. Even though you can skip options, you cannot enter options out of sequence.

Syntax `show [ip | ipv6] tcp statistics [vrf vrfName] [brief | detailed | diagnostic] [delta] [local-address localAddress] [local-port localPort] [remote-address remoteAddress] [remote-port remotePort] [filter]`

- `ip`—Displays only IPv4 TCP statistics
- `ipv6`—Displays only IPv6 TCP statistics
- `vrfName`—Name of the VRF
- `brief`—Displays a brief summary of each TCP connection
- `detailed`—Displays detailed statistics for each TCP connection
- `diagnostic`—Displays diagnostic information collected on all TCP connections, including per-connection logging information
- `delta`—Displays baselined statistics
- `localAddress`—Local IPv4 or IPv6 address for which session statistics are displayed
- `localPort`—Local port number for which session statistics are displayed
- `remoteAddress`—Remote IP v4 or IPv6 address for which session statistics are displayed
- `remotePort`—Remote port number for which session statistics are displayed
- `filter`—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
`ip` keyword made optional in JUNOS Release 7.2.0.
`ipv6` keyword added in JUNOS Release 7.2.0.

show tech-support

Description Displays technical support information for use in troubleshooting the router. Runs various commands to collect the information. By default, this command requires level 15 access.

Syntax `show tech-support [[description] [filter] | defunct-commands]`

- `description`—Any string you wish to include that describes the problem that prompted you to run the command
- `filter`—See *Filtering show Commands* in *About This Guide*
- `defunct-commands`—Displays commands that hang the system and cause the commands to be ignored until the hang condition for that command clears; clearing the hang condition can require a reboot of the router

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show telnet

Description	Displays telnet daemons.
Syntax	show telnet
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show terminal

Description	Displays information about terminal configuration settings for the current terminal line.
Syntax	show terminal [<i>filter</i>] <ul style="list-style-type: none">■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

show terminate-code

Description	Displays information about the current mappings of application terminate reasons to standards-based terminate codes.
Syntax	show terminate-code { <i>application</i> [<i>terminateReason</i> <i>translationApplication</i>] <i>translationApplication</i> [<i>terminateCode</i>] } [<i>filter</i>] <ul style="list-style-type: none">■ <i>application</i>— Application; AAA, L2TP, PPP, or RADIUS client■ <i>terminateReason</i>—Reason that the subscriber's session was terminated■ <i>translationApplication</i>—Application whose terminate code is used for the mapping; for example, RADIUS■ <i>terminateCode</i>—Code used by the translation application to identify the terminate reason; for example, a RADIUS Acct-Terminate-Cause code■ <i>filter</i>—See <i>Filtering show Commands</i> in <i>About This Guide</i>
Mode	Privileged Exec
Release Information	Command introduced in JUNOS Release 7.3.0.

show timing

Description Displays router timing settings and operational status.

Syntax show timing [*filter*]

- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show track

Description Displays tracking details for the object you specify.

Syntax show track *objectName* [*filter*]

- *objectName*—Name of the IPv4 prefix object
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

show track brief

Description Displays a one-line summary of all IPv4 prefix objects being tracked.

Syntax show track brief

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

show traffic-class

Description Displays information about traffic class(es) configured on the E-series router.

Syntax show traffic-class [*trafficClassName*] [*brief* | *references*] [*filter*]

- *trafficClassName*—Name of the traffic class
- *brief*—Displays information in a condensed format
- *references*—Displays QoS profiles and traffic class groups that reference this profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Service Levels with Traffic Classes

show traffic-class-group

Description Displays information about a traffic class group configured on the E-series router.

Syntax show traffic-class-group
[*trafficClassGroupName* [slot [*trafficClassGroupSlotNumber*]]]
[brief | references] [*filter*]

- *trafficClassGroupName*—Name of the traffic class group
- *trafficClassGroupSlotNumber*—Number of the slot associated with the group, in the range 0–17
- brief—Displays information in a condensed format
- references—Displays QoS profiles and traffic class groups that reference this profile
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Monitoring Service Levels with Traffic-Class Groups

show tunnel-server

Description Displays status and configuration information for dedicated and shared tunnel-server ports configured on the router. You can display information for a specific tunnel-server port or for all tunnel-server ports.

Syntax show tunnel-server [config] [*interfaceSpecifier*] [*filter*]

- config—Displays configuration information about available and provisioned tunnel-service interfaces on each port, and indicates whether modules that support dedicated or shared tunnel-server ports are currently installed in the router
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*; port number specified must have the dedicated or shared tunnel-server port assigned to it
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show users

Description Displays information about users of the vty lines.

Syntax show users [detail] [all] [filter]

- detail—Displays detailed information
- all—Displays information about all lines
- filter—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show utilization

Description Displays information about the resources that the installed modules consume and forces the router to release available memory on the SRP module. The **detail** keyword displays additional information about the average CPU utilization percentage calculated over 5-second, 1-minute, and 5-minute intervals for each module installed in the router.



NOTE: When you issue this command, the router releases available memory on the SRP module immediately, but takes a few seconds to display the resources.

Syntax show utilization [detail] [filter]

- detail—Displays the average CPU utilization percentage for 5-second, 1-minute, and 5-minute intervals for each installed module
- filter—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
detail keyword added in JUNOS Release 8.0.0.

show version

Description Displays armed and running releases for every slot in the router and also displays the operational status of the SRP module and line modules for all E-series routers. The **all** keyword displays the operational status of the IOAs for the E120 router and the E320 router.

Syntax show version [all] [filter]

- all—Displays the version of the SRP modules, line modules, and IOAs on the E120 and E320 routers
- filter—See *Filtering show Commands in About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show virtual-router

Description Displays virtual routers configured on the router.

Syntax show virtual-router [*routerName*] [*summary*] [*detail*] [*filter*]

- *routerName*—Name of the virtual router
- *summary*—Displays only the total number of virtual routers and the total number of VRF instances
- *detail*—Displays detailed information about the virtual router
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

show vlan bulk-config

Description Displays information, including base profile assignments, for the bulk-configured VLAN ranges on a VLAN subinterface. You can display information for all VLAN ranges on the router, for all VLAN ranges on a particular VLAN subinterface, or for the VLAN range associated with a particular bulk configuration name.

Syntax show vlan bulk-config [{ *interfaceType* } *interfaceSpecifier*] [*name bulkConfigName*] [*filter*]

- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - fastEthernet
 - gigabitEthernet
 - tenGigabitEthernet
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *bulkConfigName*—Name associated with a VLAN range, as specified in the **vlan bulk-config** command
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.3.0.

show vlan profile

Description Displays information about overriding profile assignments for the bulk-configured VLAN ranges on a VLAN subinterface. Information about base profile assignments is not displayed. You can display information for all VLAN ranges on the router, for all VLAN ranges on a particular VLAN subinterface, or for the VLAN range associated with a particular bulk configuration name.

Syntax `show vlan [bulk-config] profile [{ interfaceType } interfaceSpecifier] override [filter]`

- *bulk-config*—Displays information about bulk-configured ranges
- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - fastEthernet
 - gigabitEthernet
 - tenGigabitEthernet
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *filter*—See *Filtering show Commands* in *About This Guide*

Mode Privileged Exec, User Exec

Release Information Command introduced in JUNOS Release 7.1.0.
bulk-config keyword and *interfaceType* variable added in JUNOS Release 7.3.0.

show vlan subinterface

Description Displays configuration and status information for a specified VLAN subinterface or for all VLAN subinterfaces configured on the router. Alternatively, you can use the **summary** keyword to display only brief summary information for all VLAN interfaces. You can also display information about the VLAN IDs or S-VLAN IDs for the specified VLAN subinterface.

Syntax `show vlan subinterface [interfaceType interfaceSpecifier] [mac-address] [filter]`

To display summary information:
`show vlan subinterface summary`

To display by VLAN ID or S-VLAN ID:
`show vlan subinterface { svlan s-vlanIdValue | vlan } { vlanIdValue | any } [mac-address] [filter]`

To display VLAN subinterfaces that are created based on agent-circuit-identifier information:

`show vlan subinterface [interfaceType interfaceSpecifier | svlan s-vlanIdValue] agent-circuit-identifier [filter]`

- *interfaceType*—One of the following interface types listed in *Interface Types and Specifiers* in *About This Guide*:
 - atm
 - fastEthernet
 - gigabitEthernet
 - lag
 - tenGigabitEthernet
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*
- *mac-address*—Displays VLAN subinterfaces configured with unique MAC addresses
- *filter*—See *Filtering show Commands* in *About This Guide*
- *summary*—Displays only the total number of VLAN subinterfaces and the total number of VLAN major interfaces configured on the router
- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *vlanIdValue*—VLAN ID number in the range 0–4095
- *any*—Specifies the VLAN ID as a wildcard
- *agent-circuit-identifier*—Specifies VLAN subinterfaces that are created based on agent-circuit-identifier information

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.
s-vlan keyword and *s-vlanIdValue* variable added in JUNOS Release 7.1.0.
vlan keyword and *vlanIdValue* variable added in JUNOS Release 7.1.0.
any and **mac-address** keywords added in JUNOS Release 7.1.0.
agent-circuit-identifier keyword added in JUNOS Release 7.3.0.

show vpls connections

Description Displays connection information for a specified VPLS instance configured on the router, or for all VPLS instances configured on the router. You can display detailed configuration and status information for one or for all VPLS connections on the router, or you can display information only for VPLS connections with a specified operational state (up or down) or remote site ID.

Syntax `show vpls connections [state up | state down | details | bridge-group vplsName | remote-site siteId]* [filter]`

- `state up`—Displays information only for operational (up) VPLS connections
- `state down`—Displays information only for nonoperational (down) VPLS connections
- `details`—Displays detailed configuration and status information for VPLS connections
- `vplsName`—Name of a specific VPLS instance created with the **bridge vpls transport-virtual-router** command; if you omit the **bridge-group** keyword and VPLS instance name, the command displays connection information for all VPLS instances configured on the router
- `siteId`—Integer, in the range 1–65535, that uniquely identifies the remote site for a VPLS instance; the site ID is configured with the **bridge vpls site-name site-id** command
- `*`—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- `filter`—See *Filtering show Commands in About This Guide*

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.

Related Topics

- Monitoring VPLS-Specific Settings

shutdown

Description In Controller Configuration Mode, disables CT3, E3, SONET, and T3 controllers. These controllers are disabled by default. In Interface Configuration mode, disables Ethernet interfaces, the HDLC layer of serial interfaces, and the SONET layer of ATM or POS interfaces. These interfaces are enabled by default. In Subinterface Configuration mode, disables ATM 1483, Ethernet, Frame Relay, PPPoE, and VLAN subinterfaces. These subinterfaces are enabled by default. The **no** version restarts disabled controllers, interfaces, and subinterfaces.

Syntax `[no] shutdown`

Mode Controller Configuration, Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

single-shot-tunnel

Description Configures the L2TP/IPSec tunnels associated with a particular L2TP host profile as single-shot tunnels. The underlying IPSec connection for a single-shot tunnel can carry no more than a single L2TP tunnel for the duration of its existence, and the L2TP tunnel can carry no more than a single L2TP session for the duration of its existence. The **no** version restores the default behavior for L2TP/IPSec tunnels, which disables the single-shot attribute.



NOTE: Although configuration of single-shot tunnels is more typically used with secure L2TP/IPSec tunnels, you can also configure single-shot tunnels for nonsecure L2TP tunnels that do *not* run over an IPSec transport connection.

Syntax [no] single-shot-tunnel

Mode L2TP Destination Profile Host Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

sleep

Description Causes the CLI to pause for a specified period of time. There is no **no** version.

Syntax sleep *sleepFor*

- *sleepFor*—Number of seconds in the range 0–4294967295

Mode All modes

Release Information Command introduced before JUNOS Release 7.1.0.

slot accept

Description Erases from NVS the type and configuration of the previous module in the specified slot, and allows you to configure a new module. Issue this command after you have installed a different type of module in a slot. You can use this command only when the state of the module in the slot is not present or disabled (mismatch). There is no **no** version.

Syntax `slot accept slotNum [subsystem]`

- *slotNum*—For ERX-7xx models, a number in the range 0–6; for ERX-14xx models, a number in the range 0–13; for the ERX-310 router, a number in the range 1–2; for the E120 router, a number in the range 0–5; for the E320 router, a number in the range 0–16
- *subsystem*—Type of subsystem on the E120 and E320 routers; use when the specified *slotNumber* is a slot that contains an SRP module
 - *srp*—Indicates the SC on one or both SRP modules; specify this keyword to accept only the configuration of the portion of the SC on the individual SRP module
 - *fabric*—Indicates the portion of the switch fabric on the SRP modules; specify this keyword to accept only the configuration of an individual fabric slice

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

slot disable

Description Disables the module installed in the specified slot. You cannot use this command on a slot that contains a primary SRP module. There is no **no** version.

Syntax `slot disable slotNum [subsystem]`

- *slotNum*—Number of the selected slot in the router; for ERX-7xx models, a number in the range 0–6; for ERX-14xx models, a number in the range 0–13; for the ERX-310 router, a number in the range 1–2; for the E120 router, a number in the range 0–5; for the E320 router, a number in the range 0–16
- *subsystem*—Type of subsystem on the E120 and E320 routers; use when the specified *slotNumber* is a slot that contains an SRP module
 - *srp*—Indicates the SC on one or both SRP modules; specify this keyword to disable only the portion of the SC on the individual SRP module
 - *fabric*—Indicates the portion of the switch fabric on the SRP modules; specify this keyword to disable only an individual fabric slice

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

slot enable

Description Enables the module installed in the specified slot. You cannot use this command on a slot that contains a primary SRP module. There is no **no** version.

Syntax slot enable *slotNum* [*subsystem*]

- *slotNum*—Number of the selected slot in the router; for ERX-7xx models, a number in the range 0–6; for ERX-14xx models, a number in the range 0–13; for the ERX-310 router, a number in the range 1–2; for the E120 router, a number in the range 0–5; for the E320 router, a number in the range 0–16
- *subsystem*—Type of subsystem on the E320 router; use when the specified *slotNumber* is a slot that contains an SRP module
 - *srp*—Indicates the SC on one or both SRP modules; specify this keyword to enable only the portion of the SC on the individual SRP module
 - *fabric*—Indicates the portion of the switch fabric on the SRP modules; specify this keyword to enable only an individual fabric slice

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

slot erase

Description Erases from NVS the type and configuration of the previous module in the specified slot, and allows you to configure a new module. Issue this command before you install a different type of module in a slot. There is no **no** version.

Syntax slot erase *slotNum* [*subsystem*]

- *slotNum*—Number of the selected slot in the router; for ERX-7xx models, a number in the range 0–6; for ERX-14xx models, a number in the range 0–13; for the ERX-310 router, a number in the range 1–2; for the E120 router, a number in the range 0–5; for the E320 router, a number in the range 0–16
- *subsystem*—Type of subsystem on the E120 and E320 routers; use when the specified *slotNumber* is a slot that contains an SRP module
 - *srp*—Indicates the SC on one or both SRP modules; specify this keyword to erase only the configuration of the portion of the SC on the individual SRP module
 - *fabric*—Indicates the portion of the switch fabric on the SRP modules; specify this keyword to erase only the configuration of an individual fabric slice

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

slot replace

Description Enables you to replace an ES2 4G LM or an ES2 10G LM with a different type of module without erasing the interface configuration on the slot. You can use this command to replace these line modules if they both are paired with the ES2-S1 GE-8 IOA or the ES2-S1 Redund IOA installed. Issue this command after you install the new type of line module in the slot. There is no **no** version.

Syntax slot replace *slotNum*

- *slotNum*—Number of the selected slot in the router; for the E120 router, a number in the range 0–5; for the E320 router, a number in the range 0–5 or 11–16

Mode Global Configuration

Release Information Command introduced in JUNOS Release 9.1.0.

snmp-server

Description Enables the SNMP agent operation. The **no** version disables this operation.

Syntax [no] snmp-server

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server clear secure-log

Description Clears SNMP secure logs, which are used by the JUNOS software packet mirroring feature. There is no **no** version.

Syntax snmp-server clear secure-log

Mode Global Configuration

Release Information Command introduced in JUNOS Release 8.0.0.

Related Topics

- [Monitoring SNMP Secure Audit Logs](#)

snmp-server community

- Description** Configures an authorized SNMP community and associates SNMPv1/v2c communities with SNMPv3 views. The **no** version removes an authorized community from the list of communities.
- Syntax** snmp-server community *commString* [view *viewName*] [*priv*] [*accessListName*]
no snmp-server community *commString*
- *commString*—Name of the SNMPv1/v2c community
 - *viewName*—Name of the SNMPv3 view, which allows configuration using available dynamic views
 - *priv*—Privileged Exec level: ro (read-only), rw (read-write), or admin (administrator)
 - *accessListName*—Name of IP access list to filter SNMP clients
- Mode** Global Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.
view keyword and *viewName* variable added in JUNOS Release 7.1.0.

snmp-server contact

- Description** Sets the router's contact information. The **no** version clears the router's contact information.
- Syntax** snmp-server contact *text*
no snmp-server contact
- *text*—String that describes the router's contact person
- Mode** Global Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.

snmp-server enable traps

Description Enables and configures global SNMP trap generation. The **no** version disables SNMP trap generation.

Syntax [no] snmp-server enable traps [*trapCategory* | snmp authentication]
[trapfilters *trapFilter*]

- *trapCategory*—SNMP trap category
 - addrPool—Local address pool traps
 - atmPing—E-series router proprietary ATM ping traps
 - bfdmib—BFD MIB traps
 - bgp—BGP state change traps
 - bulkstats—Bulkstats file full and nearly full traps
 - cliSecurityAlert—Security alerts traps
 - dhcp—DHCP traps
 - dismanEvent—Distributed management (disman) event traps
 - dosProtectionPlatform—DoS protection platform traps
 - dvmrp—DVMRP traps
 - dvmrpProp—E-series router proprietary DVMRP traps
 - environment—Power, temperature, fan, and memory utilization traps
 - fileXfer—File transfer status change traps
 - haRedundancy—High availability and redundancy traps
 - inventory—Router inventory and status traps
 - ip—Internet Protocol traps
 - ldp—LDP traps
 - link—SNMP linkUp and linkDown traps
 - log—System log capacity traps
 - mobileIpv4—Mobile IPv4 traps
 - mplste—Mplste traps
 - mrouter—Mrouter traps
 - ntp—E-series router proprietary traps
 - ospf—OSPF traps
 - packetMirror—Secure packet mirroring traps; visible only if packet mirroring is enabled

- pim—PIM traps
- ping—Ping operation traps (in disman remops MIB)
- radius—RADIUS authentication and authorization servers
- routeTable—Maximum route limit and warning threshold traps; when this trap is generated, the actual value of the exceeded warning threshold is displayed
- sonet—SONET traps
- snmp—SNMP coldStart, warmStart, link, and authenticationFailure traps
- traceroute—Traceroute operation traps (in disman remops MIB)
- vrrp—VRRP traps
- snmp—Specifies the SNMP coldStart, warmStart, and authenticationFailure traps
- authentication—Specifies the SNMP authenticationFailure trap
- *trapFilter*—Minimum severity level for filtering traps
 - emergency—Severity level 0
 - alert—Severity level 1
 - critical—Severity level 2
 - error—Severity level 3
 - warning—Severity level 4
 - notice—Severity level 5
 - informational—Severity level 6
 - debug—Severity level 7

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.
ip keyword added in JUNOS Release 7.1.0.
packetMirror keyword added in JUNOS Release 7.2.0.

Related Topics

- Monitoring SNMP Secure Packet Mirroring Traps

snmp-server group

Description Dynamically configures an SNMP server group. The **no** version removes the dynamically created group.



NOTE: You must access the CLI at privilege level 15 to view or use this command.

Syntax `snmp-server group groupName securityModel authenticationLevel [read readView] [write writeView] [notify notifyView] [storageType]`
`no snmp-server group groupName securityModel authenticationLevel`

- *groupName*—Name of the SNMPv3 group
- *securityModel*—Security model
 - v1—SNMPv1
 - v2c—SNMPv2c
 - usm—SNMPv3
- *authenticationLevel*—Method for authentication and privacy
 - none—No authentication and no privacy
 - auth—Authentication only
 - priv—Authentication and privacy
- *readView*—Name of the view for read access; the default is no access
- *writeView*—Name of the view for write access; the default is no access
- *notifyView*—Name of the view for notification; the default is no access
- *storageType*—Storage type
 - volatile—Loses contents on warm or cold start
 - nonvolatile—Preserves contents across warm or cold start. This is the default.

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.1.0.

snmp-server host

Description Configures one or more hosts to receive an SNMP trap. The **no** version removes the specified host from the list of recipients.

Syntax To specify the SNMP version, community, UDP port, trap category and trap severity:

```
snmp-server host ipAddress [ version ver ] securityString [ udp-port port ]  
[ trapCategory ]* [ trapFilters trapFilter ]
```

```
no snmp-server host ipAddress
```

To specify the ping timeout and trap queue:

```
snmp-server host ipAddress pingTimeOut timeOutValue  
[ trapQueue { drainRate queueDrainRate | full queueFull | size queueSize }  
[ drainRate queueDrainRate | full queueFull | size queueSize ]*]
```

```
snmp-server host ipAddress trapQueue  
{ drainRate queueDrainRate | full queueFull | size queueSize }  
[ drainRate queueDrainRate | full queueFull | size queueSize ]*  
[ pingTimeOut timeOutValue ]
```

```
no snmp-server host ipAddress { pingTimeOut | trapQueue { drainRate | full | size } }
```

- *ipAddress*—IP address of the SNMP trap recipient
- *ver*—SNMP protocol version for traps sent to host; one of the following values:
v1, v2c, or v3
- *securityString*—SNMP community string
- *port*—UDP port number of SNMP trap recipient
- *trapCategory*—SNMP trap category
 - *addrPool*—Local address pool traps
 - *atmPing*—E-series router proprietary ATM ping traps
 - *bfdmib*—BFD MIB traps
 - *bgp*—BGP state change traps
 - *bulkstats*—Bulkstats file full and nearly full traps
 - *cliSecurityAlert*—Security alerts traps
 - *dosProtectionPlatform*—DoS protection platform traps
 - *dvmrp*—DVMRP traps
 - *dvmrpUni*—E-series router proprietary DVMRP traps
 - *environment*—Power/temperature/fan traps
 - *fileXfer*—File transfer status change traps
 - *inventory*—Router inventory/status traps
 - *ip*—Internet Protocol traps
 - *ldp*—LDP traps
 - *link*—SNMP linkUp/linkDown traps
 - *log*—System log capacity traps

- mobileIpv4—Mobile IPv4 traps
- mplste—Mplste traps
- mrouter—Mrouter traps
- packetMirror—Secure packet mirroring traps; visible only if packet mirroring is enabled
- ospf—OSPF traps
- ping—Ping operation traps (in disman remops MIB)
- radius—RADIUS traps
- snmp—SNMP coldstart, warmstart, link, authenticationFailure traps
- traceroute—Traceroute operation traps (in disman remops MIB)
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line
- *trapFilter*—Minimum severity level for filtering traps sent to this host
 - alert—Severity level 1
 - critical—Severity level 2
 - debug—Severity level 7
 - emergency—Severity level 0
 - error—Severity level 3
 - informational—Severity level 6
 - notice—Severity level 5
 - warning—Severity level 4
- *timeOutValue*—Ping timeout in minutes, in the range 1–90; default value is 1
- *trapQueue*—Configures the SNMP trap queue for traps sent to this host
- *queueDrainRate*—Maximum number of traps per second to be sent to the host, in the range 0–2147483647; default value is 0
- *queueFull*—Method used to drop traps when the trap queue is full
 - dropFirstIn—Drops the oldest trap in the queue
 - dropLastIn—Drops the most recent trap added to the queue
- *queueSize*—Maximum number of traps to be kept in the trap queue, in the range 32–214748364; default value is 32

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.
ip keyword added in JUNOS Release 7.1.0.
packetMirror keyword added in JUNOS Release 7.2.0.

Related Topics

- Monitoring SNMP Secure Packet Mirroring Traps

snmp-server interfaces compress

Description Removes a set of sublayers from the ifTable, the ifStackTable, and the ipAddrTable. You can enter this command multiple times to remove multiple interfaces. The **no** version negates the compression.

Syntax [no] snmp-server interfaces compress [*interfaceLayer*]*

- *interfaceLayer*—Interface layer that you want to remove from the ifTable, the ifStackTable, and the ipAddrTable. If you do not specify an interface layer, the router removes the following interface layers:
 - ip
 - ppp
 - ethernetSubinterface
 - hdlc
 - pppoeInterface
 - ipLoopback
 - ipVirtual
 - pppLinkInterface
 - slepInterface/ciscoHdlc
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server interfaces compress-restriction

Description Excludes interfaces from the ifTable, the ifStackTable, and the ipAddrTable if the ifAdminStatus of the interfaces is down. The **no** version negates the restriction.

Syntax [no] snmp-server interfaces compress-restriction ifAdminStatusDown

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server interfaces description-format

Description	Sets the encoding scheme of the ifDescr and ifName objects. The no version returns the encoding method to the proprietary encoding scheme.
Syntax	<pre>[no] snmp-server interfaces description-format { common legacy proprietary }</pre> <ul style="list-style-type: none"> ■ common—Sets the encoding scheme to the conventional industry method, and provides compatibility with software that uses the industry encoding scheme ■ legacy—Sets the encoding scheme for legacy E-series routers ■ proprietary—Sets the encoding scheme to a method that is proprietary to the E-series router
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server interfaces rfc1213

Description	Specifies that the router bases numbering in the IfTable on RFC 1213. The no version restores the default value, which is to use RFC 1573 style numbering in interface tables.
--------------------	---



CAUTION: Reducing the value of the *maxIfIndex*, the *maxIfNumber*, or both, causes the router to automatically reboot to factory default settings.

The router does *not* reboot to factory defaults if you:

- Increase the values of *maxIfIndex* and/or *maxIfNumber*.
- Issue a **no** version of the **snmp-server interfaces rfc1213** command when the router is already set up for RFC 1573 style numbering.
- Enter the **snmp-server interfaces rfc1213** command with the same options multiple times.

Syntax	<pre>snmp-server interfaces rfc1213 [maxIfIndex] [maxIfNumber]</pre> <pre>[no] snmp-server interfaces rfc1213</pre> <ul style="list-style-type: none"> ■ <i>maxIfIndex</i>—Maximum value of index numbers in the interface tables, in the range 100–65535; default value is 65535 ■ <i>maxIfNumber</i>—Maximum number of interfaces in each interface table, in the range 100–65535; default value is 65535
Mode	Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server location

Description	Sets information about the router's location. The no version clears this information.
Syntax	snmp-server location <i>text</i> no snmp-server location <ul style="list-style-type: none">■ <i>text</i>—String that describes the router's location
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server management-event

Description	Launches the SNMP server event manager. The no version removes all configuration from the event manager.
Syntax	[no] snmp-server management-event
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server notificationLog ageOut

Description	Specifies when the notification log ages out. The no version returns the ageout limit to the default value, 1440 minutes.
Syntax	snmp-server notificationLog ageOut <i>ageOut</i> no snmp-server notificationLog ageOut <ul style="list-style-type: none">■ <i>ageOut</i>—Notification log ageout in minutes, in the range 0–214748364; default value is 1440
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server notificationLog entryLimit

Description Specifies the maximum number of notifications kept. The **no** version returns the limit to the default value, 500.

Syntax snmp-server notificationLog entryLimit *entryLimit*
no snmp-server notificationLog entryLimit

- *entryLimit*—Maximum number of notifications kept, in the range 1–500; default value is 500



NOTE: You can allocate up to 500 notifications across all virtual routers on the router. As you allocate entry limits for virtual routers, the available range changes to reflect the number of notifications that you have allocated.

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server notificationLog log

Description Configures the SNMP notification log tables. The **no** version removes the notification log configuration.

Syntax [no] snmp-server notificationLog log *ipAddress* [*adminStatus*] [*includeVarbinds*]

- *ipAddress*—IP address of the host for which the notification logs are kept
- *adminStatus*—Enables administrative status
- *includeVarbinds*—Specifies that log names and log indexes are included in the trap's variable bindings

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server packetsize

Description Specifies the maximum SNMP packet size in bytes. The **no** version restores the default value.

Syntax snmp-server packetsize *byteCount*
no snmp-server packetsize

- *byteCount*—Size of an SNMP packet in bytes

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server secure-log

Description	Enables secure logs, which are used by the JUNOS software's packet mirroring feature. The no version disables secure logs.
Syntax	[no] snmp-server secure-log
Mode	Global Configuration
Release Information	Command introduced in JUNOS Release 7.2.0.
Related Topics	<ul style="list-style-type: none">■ Monitoring SNMP Secure Packet Mirroring Traps

snmp-server security

Description	Specifies a security access level for the SNMP agent. The no version returns the SNMP security level to its default, no access.
Syntax	snmp-server security { no-access read read-write } no snmp-server security <ul style="list-style-type: none">■ no-access—Specifies that no other virtual routers can access this router for read or write actions■ read—Specifies that other virtual routers can access this router for read only actions■ read-write—Specifies that other virtual routers can access this router for both read and write actions
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server trap-proxy

Description	Enables or disables the SNMP trap proxy. The no version disables the SNMP trap proxy.
Syntax	[no] snmp-server trap-proxy { enable disable } <ul style="list-style-type: none">■ enable—Enables SNMP trap proxy■ disable—Disables SNMP trap proxy
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

snmp-server trap-source

Description Specifies the interface whose IP address is the source address for SNMP traps. The **no** version disables this feature.

Syntax `snmp-server trap-source interfaceType interfaceSpecifier`

`no snmp-server trap-source`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server user

Description Creates and modifies SNMPv3 users. The **no** version removes the user.

Syntax `snmp-server user userName group groupName`
`[authentication authType authKey [privacy des privKey]]`

`no snmp-server user userName`

- *userName*—Name of the SNMPv3 user
- *groupName*—Name of the group to which the user belongs
 - one of the three predefined groups (admin, public, or private) or a custom group created with SNMPv3 commands
- *authType*—One of the following authentication protocols:
 - md5—HMAC-MD5-96
 - sha—HMAC-SHA-96
- *authKey*—Password for the authentication procedure; use a 16-character password for HMAC-MD5-96 and a 20-character password for HMAC-SHA-96
- des—Specifies CBC-DES encryption algorithm for privacy
- *privKey*—Password for the privacy verification; use a 16-character password for CBC-DES

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp-server view

Description Dynamically configures an SNMP server view. The **no** version removes the dynamically created view.



NOTE: You must access the CLI at privilege level 15 to view or use this command.

Syntax `snmp-server view viewName oidTree [viewType] [storageType]`

`no snmp-server view viewName oid-tree`

- *viewName*—SNMP dynamic view name
- *oidTree*—Name of the object identifier (OID) tree
- *viewType*—OID type
 - *included*—OID is included
 - *excluded*—OID is excluded
- *storageType*—Storage type
 - *volatile*—Loses contents on warm or cold start
 - *nonvolatile*—Preserves contents across warm or cold start. This is the default.

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.1.0.

snmpTrap

Description Enables SNMP traps for DHCP local address pool utilization. You can set the maximum and minimum threshold values for local address pool utilization by using the **warning** command. The **no** version disables SNMP traps for local address pool utilization.

Syntax [no] snmpTrap

Mode DHCP Local Pool Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp trap frame-relay link-status

Description Enables processing of SNMP link status information about a Frame Relay major interface (if issued from Interface Configuration mode) or subinterface (if issued from Subinterface Configuration mode). The **no** version disables the processing of SNMP link status information.

Syntax [no] snmp trap frame-relay link-status

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp trap ip link-status

Description Enables link status traps on an IP interface. The **no** version disables link status traps on an IP interface.

Syntax snmp trap ip link-status
no snmp trap ip

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

snmp trap link-status

Description Enables processing of SNMP link status information about an interface. The **no** version disables the processing of SNMP link status information.

Syntax [no] snmp trap link-status

Mode Controller Configuration, Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

source-address

Description Specifies a source IP address for the LAC tunnel endpoint. The **no** version removes the source address.

Syntax source-address *sourceAddress*
no source-address

- *sourceAddress*—Address of the local tunnel endpoint (the LAC); can be up to 32 characters (no spaces)

Mode Domain Map Tunnel Configuration, Tunnel Group Tunnel Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

speed

- Description** When used from Line Configuration mode, sets the speed for the current and all new console sessions immediately. The **no** version reverts to the default value, 9600 bps.
- When used from Interface Configuration mode, specifies the line speed for an Ethernet interface. This command works with the **duplex** command; if you set or accept the automatically negotiate setting for either duplex mode or speed, the router negotiates both parameters with the remote device. The **no** version specifies the default, automatically negotiate or 100 Mbps (FE-8 SFP I/O module only). This command is not available for the Ethernet interface on the SRP module.
- Syntax** For console sessions:
speed *baudRate*
no speed
- *baudRate*—Terminal speed for the current console session; one of the following values: 2400, 4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200
- For Ethernet interfaces on line modules:
speed *speedValue*
no speed
- *speedValue*—Line speed; one of the following values:
 - automatically negotiate—Specifies that the router negotiates the line speed with the remote device; not valid for the FE-8 SFP I/O module
 - 10—Specifies that the router uses a line speed of 10 Mbps on a Fast Ethernet interface; not valid for Gigabit Ethernet interfaces or the FE-8 SFP I/O module
 - 100—Specifies that the router uses a line speed of 100 Mbps on a Fast Ethernet interface; not valid for Gigabit Ethernet interfaces
 - 1000—Specifies that the router uses a line speed of 1000 Mbps on a Gigabit Ethernet interface; not valid for Fast Ethernet interfaces
- Mode** Interface Configuration, Line Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.

spf-interval

Description Specifies the maximum wait time between two successive IS-IS shortest-path-first calculations. If you do not specify a level, the interval applies to both level 1 and level 2. The **no** version restores the default value, 5 seconds.

Syntax `spf-interval [level-1 | level-2] seconds`
`no spf-interval [level-1 | level-2]`

- `level-1`—Specifies a level 1 SPF
- `level-2`—Specifies a level 2 SPF
- `seconds`—Maximum time between SPF calculations in the range 0–120 seconds; default value is 5

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

split-horizon

Description Controls the split horizon and poison reverse features for RIP remote neighbors. Split horizon is enabled by default; poison reverse routing updates are disabled by default. The **no** version disables the split horizon and enables poison reverse routing updates, which set the metric for routes originating on the interface to infinity to explicitly advertise that the network is unreachable, reducing the possibility of routing loops.

Syntax `[no] split-horizon`

Mode Remote Neighbor Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

srp switch

Description Switches from the primary SRP module to the standby. This command is equivalent to the **redundancy force-switchover** command with the **srp** option. There is no **no** version.



NOTE: When the high availability state is active, this command does not take effect until all transaction data, up to when you issue the command, has been mirrored to the standby SRP module. This behavior preserves legacy behavior that requires SRP modules to be synchronized before the switchover.

Syntax `srp switch [[force] [reason]]`

- `force`—Prompts the user to confirm that the router should switch from the primary SRP module to the standby if the SRP modules are in certain states, such as writing configuration data to NVS, that could lead to loss of configuration data or corruption of NVS
- `reason`—Reason for the change

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

sscc address

Description Configures the SDX client (formerly SSCC) with the IP addresses of the SDX servers and the ports on which the servers listen for activity. The **no** version removes the specified server (primary, secondary, or tertiary) from the list of SDX servers.

Syntax `sscc { primary | secondary | tertiary } address ipAddress [port portNumber]`
`no ssc { primary | secondary | tertiary } address [ipAddress [port portNumber]]`

- `primary`—Primary SDX server
- `secondary`—Secondary SDX server
- `tertiary`—Tertiary SDX server
- `ipAddress`—IP address of an SDX server
- `portNumber`—SDX server port number on which the server listens for activity; default port is 3288

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sscc enable

Description Enables the SDX client's COPS support, which is used when the SDX service application engine communicates with a policy decision point, such as the SDX application. The **no** version disables COPS support.

Syntax `sscc enable [cops-pr]`
`no ssc enable`

- `cops-pr`—Enables COPS-policy provisioning operation. If the **cops-pr** option is not used, proprietary XDR-based COPS support is enabled.

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sscc protocol ipv6

Description Configures the SDX client to support policy and QoS configuration on IPv6 interfaces. The **no** version disables IPv6 support.

Syntax `[no] ssc protocol ipv6`

Mode Global Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

sscc retryTimer

Description Configures the delay period during which the SDX client (formerly SSCC) waits for a response from an SDX (formerly SSC) server. When the timer expires, the client submits the request to the next server and waits again for the timer to expire. The request is sent to each timer in rotation until there is a response. The **no** version restores the default delay period, 90 seconds.

Syntax `sscc retryTimer timer`
`no sscc retryTimer [timer]`

- *timer*—Time in the range 5–300 seconds

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sscc sourceAddress

Description Specifies a fixed source address for the TCP/COPS connection. The **no** version removes the address specification.

Syntax `sscc sourceAddress ipAddress`
`no sscc sourceAddress [ipAddress]`

- *ipAddress*—Source (or local) IP address of the TCP/COPS connection

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sscc sourceInterface

Description Specifies a fixed source (local) interface for the TCP/COPS connection. The **no** version removes the interface.

Syntax `sscc sourceInterface interfaceType interfaceSpecifier`
`no sscc sourceInterface [interfaceType interfaceSpecifier]`

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide*
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide*

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

sscc transportRouter

Description Configures the router on which the TCP/COPS connection is to be established. The **no** version removes the SDX client transport router.

Syntax `sscc transportRouter name`
`no ssc transportRouter [name]`

- *name*—Name of a transport router

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

statistics

Description Enables statistics for the service session profile. The **no** version disables statistics for the service session profile.

Syntax `statistics { time | volume-time }`
`no statistics`

- *time*—Displays statistics for the time attribute
- *volume-time*—Displays statistics for both the volume and time attributes

Mode Service Session Profile Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

statistics-profile

Description Configures a statistics profile. The **no** version removes the named statistics profile.

Syntax `[no] statistics-profile statisticsProfileName`

- *statisticsProfileName*—Name of the statistics profile

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Configuring Statistic Profiles for QoS](#)
- [Configuring Rate Statistics](#)
- [Configuring Event Statistics](#)

strict-priority

Description	Sets strict-priority scheduling for the scheduler node. The no version deletes the strict priority setting.
Syntax	[no] strict-priority
Mode	Scheduler Profile Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Configuring Strict-Priority Scheduling

strip-domain

Description	Strips the domain name from the username before sending an access-request message to the RADIUS server. The domain name is the text after the last @ character. For example, xyz.com is the domain name of the following: fred@abc.com@xyz.com. To stop stripping the domain name, use the disable keyword. The no version resets the default, disable .
Syntax	strip-domain { enable disable } no strip-domain <ul style="list-style-type: none"> ■ enable—Specifies the feature ■ disable—Disables the feature; this is the default setting
Mode	Domain Map Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

subscriber

Description Configures a local subscriber (when one cannot be obtained externally, as in PPP) on the E-series router to support authentication and configuration from the RADIUS server. The **no** version negates the command.

Syntax subscriber { bridgedEthernet | ip } { user | user-prefix } *userName*
domain *domainName* [{ password | password-prefix } *password*] [no-authenticate]
no subscriber { bridgedEthernet | ip }

- bridgedEthernet—Specifies bridgedEthernet as the upper interface type
- ip—Specifies IP as the upper interface type
- user—Employs the username as specified
- user-prefix—Appends the interface physical location to the username
- *userName*—RADIUS username
- *domainName*—Domain name
- password—Employs the password as specified
- password-prefix—Appends the interface physical location to the password
- *password*—RADIUS password
- no-authenticate—Disables authentication

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

subscriber disconnect

Description Enables the E-series router to receive RADIUS-initiated disconnect messages from the RADIUS server. The **no** version restores the default, in which support for RADIUS-initiated disconnect messages is disabled on the router.



NOTE: This command and the RADIUS dynamic-request server feature replace the **radius disconnect client** command, which has been deprecated and may be removed completely in a future release. The RADIUS Disconnect Configuration mode has also been deprecated.

Syntax [no] subscriber disconnect

Mode RADIUS Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

subscriber-interface-type

Description Assigns a subscriber-interface type to a QoS parameter definition. Subscriber-interface types represent subscriber interfaces to which QoS clients can apply QoS parameter instances obtained through RADIUS, SRC, or QoS profiles. You can specify up to four subscriber-interface types for each parameter definition. The **no** version removes the subscriber-interface type from the parameter definition.

Syntax `subscriber-interface-type subscriberInterfaceType`
`no subscriber-interface-type { subscriberInterfaceType | all }`

- *subscriberInterfaceType*—One of the following subscriber-interface types:
atm-vc, ip, ipv6, l2tp-session, vlan
- all—Removes all subscriber-interface types

Mode QoS Parameter Definition

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- [Configuring a Basic Parameter Definition for QoS Administrators](#)

subscriber-policy

Description Creates a nondefault subscriber policy for a subscriber (client) interface that belongs to a bridge group or to a VPLS instance, and accesses Subscriber Policy Configuration mode from which you define the policy. A subscriber policy is a set of forwarding and filtering rules that specifies how the subscriber interface handles various packet types. The **no** version removes the nondefault subscriber policy from the router.

You cannot change the default subscriber policy values for trunk (server) interfaces that belong to a bridge group or to a VPLS instance. You also cannot change the default subscriber policy values for a VPLS virtual core interface, which acts as a trunk interface. The VPLS virtual core interface represents all the MPLS tunnels from the router to the remote VPLS edge (VE) devices.

Syntax `[no] subscriber-policy subscriberPolicyName`

- *subscriberPolicyName*—Name of the subscriber policy; alphanumeric string of up to 32 characters

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

summary-address

Description Creates aggregate addresses for IS-IS or aggregates external routes at the border of the OSPF domain. The **no** version restores the default.

Syntax IS-IS:
summary-address *address mask* [*level-1* | *level-1-2* | *level-2*] [*metric*] [*tag tagValue*]
no summary-address *address mask* [*level-1* | *level-1-2* | *level-2*]

- *address*—Summary IP address designated for a range of addresses
- *mask*—IP subnet mask used for the summary route
- *level-1*—Summarizes routes redistributed into level 1; when distributing routes domain wide, summarizes routes leaked from level 2 into level 1
- *level-1-2*—Summarizes routes redistributed into level 1 and level 2 IS-IS, and routes leaked between levels
- *level-2*—Summarizes routes learned by level 1 routing into the level 2 backbone with the configured address/mask value; also summarizes routes redistributed into level 2 IS-IS
- *metric*—Number in the range 1–16777215; the default metric value. The summary uses this value when advertising the summary address. When no metric is supplied, uses the value of the lowest-cost route that this is summarizing (default).
- *tagValue*—Number in the range 1–4294967295 that identifies the route tag assigned to the IS-IS summary address

OSPF:

[no] summary-address *address mask*

- *address*—Summary address designated for a range of addresses
- *mask*—IP subnet mask used for the summary route

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

summary-prefix

Description	In Address Family configuration mode, aggregates external IPv6 routes at the border of the IS-IS domain. In Router Configuration mode, aggregates external IPv6 routes at the border of the OSPFv3 domain. The no version restores the default.
Syntax	<p>For IS-IS from Address Family Configuration mode:</p> <pre>summary-prefix <i>ipv6Prefix</i> [level-1 level-1-2 level-2] [<i>metricValue</i>] [<i>tagValue</i>]</pre> <pre>no summary-prefix <i>ipv6Prefix</i></pre> <p>For OSPFv3 from Router Configuration mode:</p> <pre>[no] summary-prefix <i>ipv6Prefix/ipv6prefixLength</i></pre> <ul style="list-style-type: none"> ■ <i>level-1</i>—Specifies the aggregation of IPv6 routes into IS-IS level 1 ■ <i>level-1-2</i>—Specifies the aggregation of IPv6 routes into IS-IS level 1 and level 2 ■ <i>level-2</i>—Specifies the aggregation of IPv6 routes into IS-IS level 2 ■ <i>metricValue</i>—Metric (cost) for the interface to links at the specified level; number in the range 1–16777215 ■ <i>tagValue</i>—Number in the range 1–4294967295 that identifies the route tag assigned to the IS-IS interface ■ <i>ipv6Prefix</i>—IPv6 network number ■ <i>ipv6PrefixLength</i>—Length of the IPv6 prefix; a decimal value that indicates how many of the higher-order contiguous bits of the IPv6 address comprise the prefix (the network portion of the IPv6 address). A slash (/) must precede this value.
Mode	Address Family Configuration (IS-IS), Router Configuration (OSPFv3)
Release Information	Command introduced before JUNOS Release 7.1.0. IS-IS version added in JUNOS Release 8.2.0.

suppress-default

Description	Suppresses an IS-IS level 1-2 router from indicating that it can reach destinations outside the area, thus preventing level 1 routers from installing a default route to the level 1-2 router. The no version disables suppression of default routes.
Syntax	[no] suppress-default
Mode	Router Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

suspicious-control-flow-detection grouping-off

Description	Turns off suspicious control flow detection overflow protection; flows are grouped into larger entities when the line module flow table overflows. The no version turns on overflow protection, which is the default.
Syntax	[no] suspicious-control-flow-detection grouping-off
Mode	Global Configuration
Release Information	Command introduced in JUNOS Release 7.3.0.

suspicious-control-flow-detection off

Description Turns off suspicious control flow detection. The **no** version turns on suspicious control flow detection, which is the default.

Syntax [no] suspicious-control-flow-detection off

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

suspicious-control-flow-detection protocol backoff-time

Description Sets the backoff expiration time when the flow is no longer considered suspicious for a specific protocol. The **no** version restores the default value of 300 seconds for a protocol.

Syntax suspicious-control-flow-detection protocol *protocolValue* backoff-time *backoffTimeValue*
no suspicious-control-flow-detection protocol *protocolValue* backoff-time

- *protocolValue*—Name of the protocol
- *backoffTimeValue*—Period of time in seconds; 0 or a number in the range 10–1000; a value of zero means that a suspicious flow does not change to the nonsuspicious state because of a timeout; if the low threshold value is zero and the backoff time is zero, the flow is only considered no longer suspicious if the rate (in packets per second) goes to zero

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

suspicious-control-flow-detection protocol low-threshold

Description Sets the low threshold rate at which a suspicious flow becomes no longer suspicious for a specific protocol. The **no** version restores the default for a protocol, which is a protocol-dependent non-zero numeric value.

Syntax suspicious-control-flow-detection protocol *protocolValue*
low-threshold *lowThresholdValue*
no suspicious-control-flow-detection protocol *protocolValue* low-threshold

- *protocolValue*—Name of the protocol
- *lowThresholdValue*—Threshold value in packets per second; 0 or a number in the range 1–32767; a value of zero means that a suspicious flow cannot change to the nonsuspicious state via a threshold; a flow can only become nonsuspicious via a backoff time; if the low threshold value is zero and the backoff time is zero, the flow can only be considered nonsuspicious if the rate (in packets per second) goes to zero

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

suspicious-control-flow-detection protocol threshold

Description Sets a threshold rate at which a flow becomes suspicious for a specific protocol. The **no** version restores the default for a protocol, which is a protocol-dependent numeric value.

Syntax suspicious-control-flow-detection protocol *protocolValue* threshold *thresholdValue*
no suspicious-control-flow-detection protocol *protocolValue* threshold

- *protocolValue*—Name of the protocol
- *thresholdValue*—Zero or a number in the range 3–65535; when set to zero, no flows for the protocol type are considered suspicious

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

svlan ethertype

Description In Interface Configuration mode, specifies the Ethertype of an S-VLAN. The **no** version restores the default value, 9100.

In Profile Configuration mode, specifies the available Ethernets that the packet must use to create a dynamic VLAN subinterface. The **no** version restores the default value, autoconfig.

Syntax svlan ethertype *ethertypeValue*
no svlan ethertype

- *ethertypeValue*—One of the following Ethertype values:
 - 8100—Specifies Ethertype value 0x8100, as defined in IEEE Standard 802.1q
 - 88a8—Specifies Ethertype value 0x88a8, as defined in draft IEEE Standard 802.1ad
 - 9100—Specifies Ethertype value 0x9100, which is the default for Interface Configuration mode
 - autoconfig—Specifies in a VLAN profile that the packet can use any Ethertype to create a dynamic VLAN subinterface; this is the default for Profile Configuration mode

Mode Interface Configuration, Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.
88a8 keyword added in JUNOS Release 7.1.0.

Related Topics

- Configuring S-VLAN Tunnels for Layer 2 Services

svlan id

Description Assigns an S-VLAN ID and a VLAN ID to a VLAN subinterface, or, with the use of the **any** keyword, create an S-VLAN tunnel. There is no **no** version.

Syntax `svlan id s-vlanIdValue { vlanIdValue | any } [mac-address macAddress]`

- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095, which is unique within the Ethernet interface
- *vlanIdValue*—VLAN ID number in the range 0–4095, which is unique within the Ethernet interface
- *any*—Tunnels traffic from VLANs configured with the specified S-VLAN ID and any VLAN ID to the same destination across an MPLS network
- *macAddress*—MAC address of the interface; when you do not specify a unique MAC address, the S-VLAN uses the MAC address of the Ethernet interface

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Configuring S-VLAN Tunnels for Layer 2 Services](#)

svlan qos-parameter

Description Attaches a QoS parameter instance to the specified S-VLAN ID on the Ethernet major interface. The **no** version detaches the parameter instance from the S-VLAN ID.

Syntax `svlan s-vlanIdValue qos-parameter qosParameterInstanceName qosParameterValue`
`no svlan s-vlanIdValue qos-parameter qosParameterInstanceName`

- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *qosParameterInstanceName*—Name of the parameter instance that you want to attach to the VP
- *qosParameterInstanceValue*—Number of the scheduler rate for the parameter instance; the default value is the minimum value defined in the parameter definition

Mode Interface Configuration

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- [Creating Parameter Instances](#)

svlan qos-profile

Description Attaches a QoS profile to the specified S-VLAN ID on the interface. The **no** version detaches the QoS profile from the S-VLAN ID.

Syntax [no] `svlan s-vlanIdValue qos-profile qosProfileName`

- *s-vlanIdValue*—S-VLAN ID number in the range 0–4095
- *qosProfileName*—Name of the QoS profile that you want to attach to the S-VLAN ID

Mode Interface Configuration

Release Information Command introduced in JUNOS Release 7.1.0.

Related Topics

- Attaching a QoS Profile to an Interface

switch-profile

Description From Domain Map Tunnel Configuration mode, applies the specified L2TP tunnel switch profile to sessions associated with an AAA domain map. From Tunnel Group Tunnel Configuration mode, applies the specified L2TP tunnel switch profile to sessions associated with an AAA tunnel group. An L2TP tunnel switch profile defines the L2TP tunnel switching behavior for the interfaces to which this profile is assigned. The **no** version removes the tunnel switch profile assignment from the AAA domain map or AAA tunnel group.

Syntax `switch-profile profileName`
`no switch-profile`

- *profileName*—Name of the tunnel switch profile; a string of up to 64 alphanumeric characters

Mode Domain Map Tunnel Configuration, Tunnel Group Tunnel Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

synchronization

Description Enables synchronization between BGP and your IGP. The **no** version advertises a network route without waiting for the IGP.

Syntax [no] `synchronization`

Mode Address Family Configuration, Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

synchronize

Description Forces the NVS file system of the redundant SRP module to synchronize with the NVS file system of the primary SRP module. Optionally, you can use the **low-level-check** keyword to force the system to validate all files or only configuration files in NVS, and to synchronize all files that failed the checksum validation test during the **flash-disk compare** command as well as any other files that are unsynchronized. There is no **no** version.

Syntax To force the NVS file system of the redundant SRP module to synchronize with the NVS file system of the primary SRP module:
`synchronize`

To force the system to validate all NVS files or only configuration files, and to synchronize all files that failed the checksum test as well as any other unsynchronized files:

`synchronize low-level-check { all | configuration }`

- `all`—Validates all files in NVS, and synchronizes all files that failed the checksum test as well as any other unsynchronized files; this option can take several minutes to complete
- `configuration`—Validates all configuration files in NVS, and synchronizes all files that failed the checksum test as well as any other unsynchronized files; this option takes less time to complete because it validates only a subset of the files in the NVS file system

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.