

E-F-G-H Commands

e3-scramble

Description Enables scrambling of the ATM cell payload on an E3 interface. E3 scrambling assists clock recovery on the receiving end of the interface. The **no** version disables scrambling.

Syntax [no] e3-scramble

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

enable

Description From User Exec mode, enters Privileged Exec mode at the specified privilege level. There is no **no** version for this use.

From SNMP Event Configuration or SNMP Trigger Configuration modes, enables the configuration for the event or trigger, respectively. The **no** version disables the event or trigger.

Syntax To access Privileged Exec mode:
enable [level]

To enable event or trigger configuration:
[no] enable

- *level*—level at which you want to access the Privileged Exec mode; default value is 10; commands generally fall into one of the following security/privilege levels:
 - 0—allows the user to execute the **help**, **enable**, **disable**, and **exit** commands
 - 1—Allows the user to execute commands in User Exec mode plus commands at level 0
 - 5—Allows the user to execute Privileged Exec **show** commands plus the commands at levels 1 and 0
 - 10—Allows the user to execute all commands except support commands, which may be provided by Juniper Networks Customer Service, or the ability to assign privileges to commands
 - 15—Allows the user to execute support commands and assign privileges to commands

Mode SNMP Event Configuration, SNMP Trigger Configuration, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

enabled

Description Enables the aggregation cache to start accumulating information from the flow cache. The **no** version stops the information flow from the flow cache.

Syntax [no] enabled

Mode Flow Cache Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

enable ipsec-transport

Description In IP Tunnel Destination Profile Configuration mode, specifies that the router accepts only dynamic IP tunnels protected by an IPSec transport connection. The **no** version disables IPSec transport mode.

In L2TP Destination Profile Host Configuration mode, specifies that the router accepts only L2TP tunnels protected by an IPSec transport connection. The **no** version disables IPSec transport mode.

Syntax [no] enable ipsec-transport

Mode IP Tunnel Destination Profile Configuration, L2TP Destination Profile Host Configuration

Release Information Command introduced before JUNOS Release 7.1.0.
IP Tunnel Destination Profile Configuration mode added in JUNOS Release 8.2.0.

enable password

Description Sets a password to control access to certain types of commands. The **no** version removes the password requirement.



NOTE: On the E-series router, all passwords are stored as encrypted passwords.

Syntax `enable password [level securityLevel] [passwordType] passwordText`
`no enable password [level securityLevel]`

- *securityLevel*—Security level for which you want to set the password; default value is 5; commands generally fall into one of the following security/privilege levels:
 - 0—Allows the user to execute the **help**, **enable**, **disable**, and **exit** commands
 - 1—Allows the user to execute commands in User Exec mode plus commands at level 0
 - 5—Allows the user to execute Privileged Exec **show** commands plus the commands at levels 1 and 0; this is the default level
 - 10—Allows the user to execute all commands except support commands, which may be provided by Juniper Networks Customer Service
 - 15—Allows the user to execute privilege setting and support commands
- *passwordType*:
 - 0—Specifies that an unencrypted password follows; this is the default
 - 7—Specifies that an encrypted password follows
- *passwordText*—Password, either encrypted or unencrypted, depending on the password type

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

enable proxy authenticate

Description Configures proxy authenticate for a remote host. The **no** version removes proxy authenticate configuration from the remote host.

Syntax `[no] enable proxy authenticate`

Mode L2TP Destination Profile Host Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

enable secret

Description Sets a secret to control access to certain types of commands. The **no** version removes the secret requirement.



NOTE: On the E-series router, all secrets are stored as encrypted secrets.

Syntax `enable secret [level securityLevel] [secretType] secretText`

`no enable secret [securityLevel]`

- *securityLevel*—Security level for which you want to set the secret; default value is 5
 - 0—Allows the user to execute the **help**, **enable**, **disable**, and **exit** commands
 - 1—Allows the user to execute commands in User Exec mode plus commands at level 0
 - 5—Allows the user to execute Privileged Exec **show** commands plus the commands at levels 1 and 0; this is the default level
 - 10—Allows the user to execute all commands except support commands, which may be provided by Juniper Networks Customer Service
 - 15—Allows the user to execute support commands
- *secretType*—One of the following:
 - 0—Indicates that the secret is unencrypted; this is the default
 - 7—Indicates that the secret is encrypted
- *secretText*—Secret, either encrypted or unencrypted, depending on the secret type

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

encapsulation

Description In ATM VC Configuration mode, configures the encapsulation method on an ATM PVC. The encapsulation method represents the format of the data units that traverse the PVC. The **encapsulation** command is valid only for data PVCs; you cannot use this command for control (ILMI or signaling) PVCs. The **no** version restores the default encapsulation method, **aal5snap**.

In ATM VC Class Configuration mode, configures the encapsulation method as part of a VC class definition that you assign to an ATM data PVC. The **no** version restores the default encapsulation method, **aal5snap**, in the VC class.

Syntax `encapsulation encapsulationType`
`no encapsulation`

- *encapsulationType*—One of the following encapsulation methods for data PVCs:
 - **aal0**—Causes the router to receive raw ATM cells on this PVC and forward the cells without performing AAL5 packet reassembly
 - **aal5all**—Configures ATM over MPLS passthrough connections; the router passes through all ATM AAL5 traffic without interpreting it
 - **aal5autoconfig**—Enables autodetection of the 1483 encapsulation (LLC/SNAP or VC multiplexed)
 - **aal5mux ip**—Configures a VC-based multiplexed circuit used for IP only
 - **aal5snap**—Configures an LLC encapsulated circuit; an LLC/SNAP header precedes the protocol datagram

Mode ATM VC Configuration, ATM VC Class Configuration

Release Information Command introduced in JUNOS Release 7.1.0.
 ATM VC Class Configuration mode added in JUNOS Release 7.3.0.

encapsulation bridge1483

Description Configures bridged Ethernet as the encapsulation method on an interface and optionally assigns a MAC address to the interface. The **no** version removes bridged Ethernet as the encapsulation method on the interface.

Syntax `encapsulation bridge1483 [mac-address macAddress]`
`no encapsulation bridge1483`

- *macAddress*—User-configured MAC address for the interface. The MAC address format is a dotted triple of four-digit hexadecimal numbers; for example, 0090.1a40.4c7c. Multicast MAC address cannot be configured on bridged Ethernet interfaces.

Mode Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

encapsulation frame-relay ietf

Description	Enables Frame Relay encapsulation. The no version removes Frame Relay configuration from an interface.
Syntax	encapsulation frame-relay ietf no encapsulation frame-relay
Mode	Interface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none">■ Configuring Frame Relay Layer 2 Services

encapsulation hdlc

Description	Enables Cisco HDLC encapsulation. The no version disables Cisco HDLC on an interface.
Syntax	[no] encapsulation hdlc
Mode	Interface Configuration, Subinterface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

encapsulation mlframe-relay ietf

Description	Enables Multilink Frame Relay encapsulation. The no version removes Multilink Frame Relay configuration from an interface.
Syntax	encapsulation mlframe-relay ietf no encapsulation mlframe-relay
Mode	Interface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

encapsulation mlppp

Description	Configures MLPPP as the encapsulation method on an individual interface. Creates an MLPPP link interface, which can be configured as a member of an MLPPP bundle. The no version disables MLPPP on an interface.
Syntax	[no] encapsulation mlppp
Mode	Interface Configuration, Subinterface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

encapsulation ppp

Description Configures PPP as the encapsulation method for the interface. The **no** version disables PPP on an interface.

Syntax [no] encapsulation ppp

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

encapsulation pppoe

Description Configures PPPoE as the encapsulation method for the interface. The **no** version removes PPPoE encapsulation from the interface.

Syntax [no] encapsulation pppoe

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

encapsulation vlan

Description Configures VLAN as the encapsulation method for the interface. The **no** version removes VLAN encapsulation from the interface.

Syntax [no] encapsulation vlan

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring Ethernet/VLAN Layer 2 Services
- Configuring Local Cross-Connects Between Ethernet/VLAN Interfaces
- Configuring S-VLAN Tunnels for Layer 2 Services

encryption

Description Sets the encryption algorithm to use in the IKE policy. The **no** version restores the default, 3DES.

Syntax encryption { des | 3des }
no encryption

- des—Specifies 56-bit DES-CBC as the encryption algorithm
- 3des—Specifies 168-bit 3DES-CBC as the encryption algorithm

Mode IKE Policy Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

end

Description Exits Global Configuration mode or any of the Configuration submodes and returns to the User Exec mode. There is no **no** version.

Syntax end

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

enrollment retry-limit

Description Specifies the number of minutes during which the router continues to send a certificate request to the CA. The **no** version restores the default.

Syntax enrollment retry-limit *minutes*
no enrollment retry-limit

- *minutes*—Number of minutes, from 0 (infinite time period) to 480; default value is 60

Mode IPSec CA Identity Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

enrollment retry-period

Description	Specifies the number of minutes that the router waits after receiving no response before resending a certificate request to the CA. The no version restores the default.
Syntax	enrollment retry-period <i>minutes</i> no enrollment retry-period <ul style="list-style-type: none"> ■ <i>minutes</i>—Number of minutes in the range 0–60 minutes; default value is 1
Mode	IPSec CA Identity Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

enrollment url

Description	Specifies the URL of the simple certificate enrollment protocol (SCEP) server to which the router sends CA certificate requests (using the ipsec ca authenticate command) and public certificate requests (using the ipsec ca enroll command). The no version deletes the URL specification.
Syntax	enrollment url <i>url</i> no enrollment url <ul style="list-style-type: none"> ■ <i>url</i>—URL of SCEP server; in the format <code>http://server_ipaddress</code>; a maximum of 200 characters
Mode	IPSec CA Identity Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

equipment loopback

Description	Enables or disables the router's ability to be placed in loopback by a remote device connected on a CT3 or T3 interface. The no version disables the router's ability to be placed in loopback by the remote device.
Syntax	equipment { customer network } loopback no equipment <ul style="list-style-type: none"> ■ <i>customer</i>—Enables the router to enter into loopback when it receives an appropriate signal from the remote interface ■ <i>network</i>—Disables the router's ability to enter into loopback when it receives an appropriate signal from the remote interface
Mode	Controller Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

erase secrets

Description Removes all CLI passwords or secrets. Execute before pressing the NMI button on the SRP module. There is no **no** version.



NOTE: If you enter the **service unattended password-recovery** command, the behavior of the **erase secrets** command changes. The **erase secrets** command will not take any parameters and will not be available through a vty session until you enter **no service unattended password-recovery**.

Syntax `erase secrets seconds`
■ *seconds*—Number of seconds in the range 1–60 to allow for the operation

Mode User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

ethernet description

Description Adds a text description to a non-SRP Fast Ethernet or Gigabit Ethernet interface. The **no** version removes the description from the interface.

Syntax `ethernet description name`
`no ethernet description`
■ *name*—String of up to 64 characters

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

ethernet dos-protection-group

Description Attaches an Ethernet denial of service (DoS) protection group to an interface. The **no** version removes the attachment of the DoS protection group from the interface.

Syntax `ethernet dos-protection-group groupName`
`no ethernet dos-protection-group`
■ *groupName*—Name of the DoS protection group; string of up to 31 alphanumeric characters

Mode Interface Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

event

Description	Creates an event and launches the event configuration mode in the SNMP server event manager. The no version removes the event.
Syntax	<pre>[no] event eventOwner eventName</pre> <ul style="list-style-type: none"> ■ <i>eventOwner</i>—Owner associated with this event; string of up to 32 alphanumeric characters ■ <i>eventName</i>—Name associated with this event; string of up to 32 alphanumeric characters
Mode	SNMP Event Manager Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

exceeded-action

Description	Sets the action for packets not conforming to the committed rate and committed burst size, and not conforming to the peak rate and peak burst size. The no version restores the default, drop.
Syntax	<p>For IP and IPv6 rate-limit profiles:</p> <pre>[no] exceeded-action { drop transmit mark markVal }</pre> <p>For L2TP rate-limit profiles:</p> <pre>[no] exceeded-action { drop transmit }</pre> <p>For MPLS rate-limit profiles:</p> <pre>[no] exceeded-action { drop transmit mark-exp expValue }</pre> <p>For hierarchical rate-limit profiles:</p> <pre>[no] exceeded-action { drop transmit [conditional final] }</pre> <ul style="list-style-type: none"> ■ <i>drop</i>—Drops the packet ■ <i>transmit</i>—Transmits the packet; for hierarchical rate limits: <ul style="list-style-type: none"> ■ <i>conditional</i>—Packets must pass the next rate limit ■ <i>final</i>—Packets exit the hierarchy at rate limit ■ <i>markVal</i>—Marks value in the range 0–255; mark actions are not supported on hierarchical rate limits ■ <i>expValue</i>—EXP bit value in the range 0–7
Mode	Rate Limit Profile Configuration
Release Information	Command introduced before JUNOS Release 7.1.0. conditional and final keywords added in JUNOS Release 7.2.0.
Related Topics	<ul style="list-style-type: none"> ■ Creating a Two-Rate Rate-Limit Profile

exceeded-drop-threshold

Description Configures the threshold above which exceeded-drop-events are logged. The **no** version removes the threshold.

Syntax exceeded-drop-threshold *exceededDropThreshold*
no exceeded-drop-threshold

- *exceededDropThreshold*—Bits per second in the range 0–1073741824

Mode Statistics Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring Event Statistics

exceeded-fraction

Description Sets the percentage of the total queue length that can be occupied before dropping exceeded packets. The **no** version returns the exceeded fraction to its default setting.

Syntax exceeded-fraction *exceededFraction*
no exceeded-fraction

- *exceededFraction*—Percentage range 0–100; default value is 25

Mode Queue Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring Queue Profiles to Manage Buffers and Thresholds

exceeded-length

Description Sets minimum and maximum constraints for the queue's exceeded lengths. The **no** version removes constraints on the queue's exceeded length.

Syntax `exceeded-length minimumExceededLength [maximumExceededLength]`
`no exceeded-length`

- *minimumExceededLength*—Range 0–1073741824
- *maximumExceededLength*—Range 0–1073741824

Mode Queue Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Configuring Queue Profiles to Manage Buffers and Thresholds](#)

exceeded-threshold

Description Specifies the exceeded queue thresholds and maximum drop probability. The **no** version removes exceeded threshold.

Syntax `exceeded-threshold { percent MinThresholdPercent MaxThresholdPercent | MinThresholdBytes MaxThresholdBytes } MaxDropProbability`
`no exceeded-threshold`

- *percent*—Specifies *exceeded* queue thresholds as percentages
- *MinThresholdPercent*—Minimum queue threshold as a percentage of queue length
- *MaxThresholdPercent*—Maximum queue threshold as a percentage of queue length
- *MinThresholdBytes*—Minimum queue threshold in bytes
- *MaxThresholdBytes*—Maximum queue threshold in bytes
- *MaxDropProbability*—Maximum drop probability

Mode Drop Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- [Configuring RED](#)
- [Configuring WRED](#)

exception dump

Description Specifies the location from and to which the router should transfer a core dump file. Core dumps are enabled and stored in local NVS by default. The **no** version disables the command.

Syntax exception dump { except-srp | srp-only } { local | *ipAddress* [*directoryName*] }
no exception dump

- except-srp—Generates core dump for all non-SRP modules
- srp-only—Generates core dump for only the SRP modules
- local—Nonvolatile storage memory
- *ipAddress*—IP address of the server to which the router will transfer the core dump file
- *directoryName*—Name of the directory on the server to which the router will transfer the core dump file

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exception gateway

Description Specifies the gateway through which the router sends the core dump file to the remote FTP server. The **no** version returns the value to its default (null).

Syntax exception gateway *ipAddress*
no exception gateway

- *ipAddress*—IP address of the gateway

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exception http-redirect

Description Creates the exception rule within an IP policy classifier group to allow the application to perform an application-dependent action on the content of the packet. HTTP redirect is the only application that is available as a destination of the **exception** rule. This command is not supported for the ES2 10G LM or the ES2 10G Uplink LM. The **no** version removes the exception rule.

Syntax [no] exception http-redirect

Mode Classifier Group Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

Related Topics

- Assigning Values to the ATM CLP Bit

exception monitor

Description Enables the core dump monitor and specifies the location to which the router transfers core dump files. The **no** version disables the core dump monitor.

Syntax exception monitor *ipAddress* [*directoryName*]
no exception monitor

- *ipAddress*—IP address of the server to which you want the router to transfer core dump files
- *directoryName*—Name of the directory on the server to which you want the router to transfer core dump files

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exception monitor interval

Description Specifies the interval at which you want the router to check NVS for core dump files. The **no** version disables the core dump monitor.

Syntax exception monitor interval *interval*
no exception monitor interval

- *interval*—Number of minutes between NVS checks; in the range 1–1440

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exception protocol ftp

- Description** Specifies the username and password for FTP access to a host where you transferred a core dump file. The **no** version restores the defaults.
- Syntax** exception protocol ftp [[*algorithmType*] *userName* [[*algorithmType*] *password*]]
no exception protocol
- *algorithmType*—Type of user name or password
 - 0—Indicates the *password* is unencrypted; the default
 - 8—Indicates the *password* is encrypted
 - *userName*—Username required to access the FTP server; the default username is anonymous
 - *password*—Password required to access the FTP server; default value is no password
- Mode** Global Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.

exception source

- Description** Specifies the IP address and mask of the router interface over which you want to send the core dump file to the remote FTP server. The **no** version returns the value to its default (null).
- Syntax** exception source *ipAddress ipAddressMask*
no exception source
- *ipAddress*—IP address of the interface
 - *ipAddressMask*—Optionally add the IP address mask of the interface
- Mode** Global Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.

excess-burst

Description	Sets amount of bandwidth allocated to accommodate a packet in progress when the rate is in excess of the burst. The no version restores the default value, 0.
Syntax	<pre>excess-burst { size millisecond <i>milliseconds</i> }</pre> <pre>no excess-burst</pre> <ul style="list-style-type: none"> ■ <i>size</i>—Amount of bandwidth allocated; in the range 0–4294967295 ■ <i>milliseconds</i>—Milliseconds in the range 1–10000
Mode	Rate Limit Profile Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none"> ■ Creating a Two-Rate Rate-Limit Profile

exclude-subsystem

Description	Excludes subsystem files from being copied when you copy a software release to the router. The no version removes the exclusion for a specified subsystem file or all subsystem files.
Syntax	<pre>exclude-subsystem <i>subsystemName</i></pre> <pre>no exclude-subsystem [<i>subsystemName</i>]</pre> <ul style="list-style-type: none"> ■ <i>subsystemName</i>—Name of the subsystem file to be excluded
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

exec-banner

Description	Controls display of an exec banner (configured with the banner command) on a particular line after user authentication (if any) and before the first prompt of a CLI session. The no version disables the exec banner and the motd banner on the line. The default version restores the default setting, in which the banner is enabled on all lines.
Syntax	<pre>[no default] exec-banner</pre>
Mode	Line Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

exec-timeout

Description Sets the time interval that the console or vty line waits for expected user input. The **no** version restores the default value, which is no time limit.

Syntax `exec-timeout minutes [seconds]`
`no exec-timeout`

- *minutes*—Number of minutes for the time limit; in the range from 0 to 35791
- *seconds*—Number of seconds in addition to the minutes for the time limit; in the range from 0 to 2147483

Mode Line Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

existence-test

Description Defines existence test values for the trigger that you are configuring, including binding an event to the existence-test trigger, specifying a startup condition, and defining an existence-test type. The **no** version deletes the existence-test values for this trigger or removes either the startup condition or event binding.

Syntax `existence-test { event eventOwner eventName |
startup { absent | present } | test-type { absent | changed | present } }`
`no existence-test [event | startup | test-type]`

- *eventOwner*—Name of event owner that partially specifies event to trigger the existence test; string of up to 32 alphanumeric characters
- *eventName*—Name of event that partially specifies event to trigger the existence test; string of up to 32 alphanumeric characters
- *startup*—Specifies startup existence condition that you predict the sample to follow; absent or present; you can specify both conditions in the same command
- *test-type*—Specifies type of existence test to perform; absent, changed, or present; you can specify one, two, or all three conditions in the same command

Mode SNMP Trigger Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exit

Description Exits the current command mode. In User Exec and Privileged Exec modes, logs out of the CLI. There is no **no** version.

Syntax exit

Mode All modes

Release Information Command introduced before JUNOS Release 7.1.0.

exit-address-family

Description Exits from Address Family Configuration mode and returns to Router Configuration mode. There is no **no** version.

Syntax exit-address-family

Mode Address Family Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring BGP Signaling

exit-remote-neighbor

Description Exits from Remote Neighbor Configuration mode and returns to Router Configuration mode. There is no **no** version.

Syntax exit-remote-neighbor

Mode Remote Neighbor Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

exp-mask

Description Sets the EXP mask to be applied with the mark values. The **no** version restores the default mask of 7.

Syntax [no] exp-mask *maskValue*

- *maskValue*—EXP mask value in the range 0–7

Mode Rate Limit Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Creating a Two-Rate Rate-Limit Profile

export destination

Description Configures an export destination for the aggregation cache. The **no** version removes the destination.

Syntax [no] export destination { *hostName* | *ipAddress* } udp-port

- *hostName*—Name of the destination host
- *ipAddress*—Address of IP interface
- udp-port—Specifies UDP port as the destination

Mode Flow Cache Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

export map

Description Associates a route map with a VRF to modify or filter routes exported by the VRF to the global BGP VPN RIB in the parent VR. Both IPv4 and IPv6 routes are exported unless you issue the appropriate keyword to restrict exportation. The **no** version restores the default behavior, which is to export all routes without applying a route map.

Syntax export map [ipv4 | ipv6] *routeMap* [filter]

no export map [ipv4 | ipv6]

- ipv4—Specifies that only IPv4 routes are exported to the global BGP VPN RIB
- ipv6—Specifies that only IPv6 routes are exported to the global BGP VPN RIB
- *routeMap*—Name of a route map; string of up to 32 alphanumeric characters
- filter—Prevents routes that do not match the route map from being exported; if absent, such routes are exported but their attributes are not modified by the route map

Mode VRF Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

export source

Description Sets the source IP address for datagrams containing information from the cache. The **no** version removes the setting of the IP address.

Syntax [no] export source interface *interface*

- *interface*—Name of the interface

Mode Flow Cache Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

extended-authentication

Description Specifies the extended user authentication protocol for use during the extended user authentication protocol exchange. The **re-authenticate** keyword enables the reauthentication option (a second authentication procedure). The **skip-peer-config** keyword disables the router from configuring peer IP characteristics. The **no** version restores the default protocol, pap.

Syntax extended-authentication { none | pap | chap } [re-authenticate] [skip-peer-config]
no extended-authentication

- none—Specifies that no extended authentication is performed
- pap—Specifies the use of PAP protocol for extended authentication
- chap—Specifies the use of CHAP protocol for extended authentication
- re-authenticate—Enables reauthentication when IKE SA rekeying occurs
- skip-peer-config—Disables configuration of peer IP characteristics

Mode IPSec Tunnel Profile Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

external-paths

Description Configures the maximum number of received external BGP best paths allowed for route-target signaling. The **no** version restores the default value, 1.

Syntax external-paths *limit*
no external-paths

- *limit*—Number of paths, in the range 1–255

Mode Address Family Configuration, Router Configuration

Release Information Command introduced in JUNOS Release 8.2.0.

fabric-strict-priority

Description Specifies strict priority scheduling for queues in the traffic class in the fabric. The **no** version deletes the strict priority setting.

Syntax [no] fabric-strict-priority

Mode Traffic Class Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

fabric-weight

Description Specifies the relative weight for queues in the traffic class in the fabric. The **no** version sets the fabric weight to the default value.

Syntax fabric-weight *weight*
no fabric-weight

- *weight*—Range 1–63; default value is 8

Mode Traffic Class Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

fabric weights

Description Defines the multicast-to-unicast traffic ratio for the ERX-1440, ERX-310, E120, or E320 router switch fabric. The **no** version returns the switch fabric to its default multicast:unicast ratio (15:2).

Syntax fabric weights multicast *multicastValue* unicast *unicastValue*
no fabric weights

- *multicastValue*—Ratio value of multicast bandwidth in the range 1–15
- *unicastValue*—Ratio value of unicast bandwidth in the range 1–15

Mode Global Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

failover-resync

Description Configures the L2TP peer resynchronization method that an L2TP failed endpoint uses to resynchronize with its peer non-failed endpoint. This command configures peer resynchronization for a host profile or a domain map tunnel, and overrides a global peer resynchronization method that is specified in Global Configuration mode. The **no** version restores the default setting, not-configured.

Syntax failover-resync { failover-protocol | failover-protocol-fallback-to-silent-failover | silent-failover | disable | not-configured }
no failover-resync

- failover-protocol—Specifies the L2TP failover protocol method
- failover-protocol-fallback-to-silent-failover—Specifies the L2TP failover protocol method; however, if the peer does not support this method, the silent failover method is used
- silent-failover—Specifies the silent failover method
- disable—Disables peer resynchronization
- not-configured—Specifies that peer resynchronization is not configured for L2TP host profiles and AAA domain map tunnels. L2TP uses the global failover method; the default setting

Mode Domain Map Tunnel Configuration, L2TP Destination Profile Host Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

filter

Description Defines a policy rule that drops all packets conforming to the current classifier control list and can be used while the policy list is referenced by interfaces. The **no** version removes the filter rule from the policy list; the **suspend** version temporarily suspends the policy rule; the **no suspend** version resumes application of a suspended rule.



NOTE: This command replaces the Policy List Configuration version of the **filter** command, which may be removed completely in a future release.

Syntax [no] [suspend] filter

Mode Classifier Group Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Policy Rule Precedence

flash-disk compare

Description Performs a checksum validation that compares the contents of the NVS file system on the primary SRP module with the contents of the NVS file system on the redundant SRP module, and detects any differences. The command validates only those files that are synchronized between the primary and redundant SRP modules; it does not validate log files, core dump files, and other files that are excluded from the system synchronization process. There is no **no** version.

Syntax flash-disk compare { all | configuration }

- all—Compares all files in NVS; this option can take several minutes to complete
- configuration—Compares only configuration files; this option takes less time to complete because it compares only a subset of the files in the NVS file system

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

flash-disk duplicate

Description Copies the contents of NVS on the primary SRP module to another NVS card. There is no **no** version.

Syntax flash-disk duplicate

Mode Boot

Release Information Command introduced before JUNOS Release 7.1.0.

flash-disk initialize

Description Performs a low-level format of unmounted flash cards. There is no **no** version.

Syntax flash-disk initialize [no-format] [disk0 | disk1]

- no-format—Erases all files but does not format the flash card
- disk0—Specifies flash card in slot 0 of the SRP module; default value is disk0; available only in Boot mode, because disk0 cannot be in an unmounted state in a router outside of Boot mode
- disk1—Specifies flash card in slot 1 of the SRP module; supported only on the E120 router and the E320 router

Mode Boot, Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
disk0 and **disk1** keywords added in JUNOS Release 7.2.0.
Privileged Exec mode added in JUNOS Release 8.0.0.

flash-disk scan

Description Scans the flash card on the primary SRP module to detect corrupt sectors, deletes files and directories that contain corrupt sectors, and fixes nonfatal errors. There is no **no** version.

Syntax flash-disk scan [repair] [disk0 | disk1]

- repair—Repairs nonfatal errors detected on flash disk
- disk0—Specifies flash card in slot 0 of the SRP module; default value is disk0; available only in Boot mode, because disk0 cannot be in an unmounted state in a router outside of Boot mode
- disk1—Specifies flash card in slot 1 of the SRP module; supported only on the E120 router and the E320 router

Mode Boot, Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.
disk0 and **disk1** keywords added in JUNOS Release 7.2.0.
Privileged Exec mode added in JUNOS Release 8.0.0.

forward

Description Defines a rule to forward all packets that match the specified classifier control list. If you do not specify a classifier control list using the **classifier-group** keyword, the router will select all packets from the interface in the direction of the attached policy list. The **no** version removes the rule from the policy list; the **suspend** version temporarily suspends the forward rule; the **no suspend** version resumes application of a suspended rule.

See the **forward interface** and **forward next-hop** commands for descriptions of the Classifier Group Configuration mode versions of this command.

Syntax [no] [suspend] forward
[interface *interfaceType* *interfaceSpecifier* [next-hop *nextHop* [ignore-default-route]]
[order *orderValue*]] | [next-hop *nextHop* [virtual-router *vrName*]
[ignore-default-route] [order *orderValue*]] |
[order *orderValue*] | classifier-group *claclName*] [precedence *precValue*]

- *interfaceType*—Interface type; see *Interface Types and Specifiers* in *About This Guide* (IP policy lists only)
- *interfaceSpecifier*—Particular interface; format varies according to interface type; see *Interface Types and Specifiers* in *About This Guide* (IP policy lists only)
- *nextHop*—Next-hop IP address (IP policy lists only)
- ignore-default-route—Ignores the default route as a consideration for the next hop (IP policy lists only)
- *vrName*—Name of the virtual router (IP policy lists only)
- *orderValue*—Order of this forward rule within the single classifier; in the range 1–32767; default value is 100 (IP policy lists only)
- *claclName*—Classifier control list used to classify packets for this policy
- *precValue*—Precedence of this rule in relation to other rules within this set: in the range 0–32768; default value is 100

Mode Policy List Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Assigning Values to the ATM CLP Bit

forward interface

Description Defines a rule to forward all packets that match the current classifier control list. The **no** version removes the rule from the policy list; the **suspend** version temporarily suspends the forward rule; the **no suspend** version resumes application of a suspended rule.



NOTE: The **forward interface** command replaces the **next-interface** command, which may be removed completely in a future release.

Syntax [no] [suspend] forward [interface *interfaceType* *interfaceSpecifier* [next-hop *nextHop* [ignore-default-route]] [order *orderValue*]]

- *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*
- *nextHop*—Next-hop IP address
- ignore-default-route—Ignores the default route as a consideration for the next hop
- *orderValue*—Order of this forward rule within the single classifier; in the range 1–32767; default value is 100

Mode Classifier Group Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Assigning Values to the ATM CLP Bit

forward next-hop

Description Defines a rule to forward all packets that match the current classifier control list. The **no** version removes the rule from the policy list; the **suspend** version temporarily suspends the forward rule; the **no suspend** version resumes application of a suspended rule.



NOTE: The **forward next-hop** command replaces the **next-hop** command, which may be removed completely in a future release.

Syntax [no] [suspend] forward next-hop *nextHop* [virtual-router *vrName*]
[ignore-default-route] [order *orderValue*]

- *nextHop*—Next-hop IP address
- *vrName*—Name of the virtual router
- ignore-default-route—Ignores the default route as a consideration for the next hop
- *orderValue*—Order of this forward rule within the single classifier; in the range 1–32767; default value is 100

Mode Classifier Group Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Assigning Values to the ATM CLP Bit

forwarding-rate-threshold

Description Configures the threshold above which forwarded-rate-exceeded events are logged. The **no** version removes the threshold.

Syntax forwarding-rate-threshold *forwardingRateThreshold*
no forwarding-rate-threshold

- *forwardingRateThreshold*—Bits per second in the range 0–1073741824

Mode Statistics Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring Event Statistics

forwarding-table route-holddown

Description Sets the number of seconds allowed after a routing table change for the accumulation of additional updates and subsequent distribution of the set of routing table changes to the line modules. The **no** version sets the hold-down time to the default value (3 seconds).

Syntax forwarding-table route-holddown *timerValue*
no forwarding-table route-holddown

- *timerValue*—Number of seconds allowed for the accumulation and subsequent distribution of routing table updates to the line modules; a range of 0-30 seconds, where 0 specifies an update following each routing table change

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay class

Description Associates a map class with a subinterface. The **no** version removes the association between the map class and the subinterface.

Syntax [no] frame-relay class *mapName*

- *mapName*—Name of the map class; use up to 64 characters

Mode Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay classifier-list

Description Creates or modifies a Frame Relay classifier control list. The **no** version removes the classifier control list.

Syntax frame-relay classifier-list *classifierName* [traffic-class *trafficClassName*]
[color { green | yellow | red }] [user-packet-class *userPacketClassValue*]
[de-bit *deValue*]

no frame-relay 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
- *deValue*—Value of the DE bit to match; 0 or 1

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Creating or Modifying Classifier Control Lists for Frame-Relay Policy Lists

frame-relay description

Description Assigns a text description or an alias to a Frame Relay interface or subinterface. Use the **show frame-relay interface** or **show frame-relay subinterface** command to display the text description. The **no** version removes the description or alias.

Syntax frame-relay description *name*

no frame-relay description

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

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay dos-protection-group

Description Attaches a Frame Relay denial of service (DoS) protection group to an interface. The **no** version removes the attachment of the DoS protection group from the interface.

Syntax frame-relay dos-protection-group *groupName*
no frame-relay dos-protection-group

- *groupName*—Name of the DoS protection group; string of up to 31 alphanumeric characters

Mode Interface Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

frame-relay fragment

Description Configures fragmentation and reassembly for the map class created with the **map-class frame-relay** command. The **no** version stops fragmentation and/or reassembly on the subinterface.

Syntax frame-relay fragment [[*fragmentSize*] [fragmentation-only] | reassembly-only]
no frame-relay fragment

- *fragmentSize*—Maximum payload size of a fragment in bytes; a number in the range 16–8188; default value is 52
- fragmentation-only—Specifies fragmentation only
- reassembly-only—Specifies reassembly only

Mode Map Class Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay interface-dlci ietf

Description Assigns a data-link connection identifier to a specified Frame Relay subinterface on the router or access server. The DLCI number identifies a virtual circuit. The **no** version removes this assignment.

Syntax frame-relay interface-dlci *dlci* ietf
no frame-relay interface-dlci *dlci*

- *dlci*—DLCI number to be used on the specified subinterface to identify a virtual circuit in the range 16–1007

Mode Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

Configuring Frame Relay Layer 2 Services

frame-relay intf-type

Description Configures a Frame Relay interface type. The **no** version restores the default value, DTE.

Syntax frame-relay intf-type *type*
no frame-relay intf-type

- *type*—One of the following interface types:
 - dce—Router is connected to user DTE equipment
 - dte—Router is connected to a Frame Relay network; the default
 - nni—Router connects two Frame Relay networks

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

Configuring Frame Relay Layer 2 Services

frame-relay keepalive

Description	Enables the LMI mechanism for serial lines using Frame Relay encapsulation. The no version disables this capability. The keepalive command is similar to the frame-relay lmi-t391dte command.
Syntax	<pre>frame-relay keepalive [seconds]</pre> <pre>no frame-relay keepalive</pre> <ul style="list-style-type: none"> ■ <i>seconds</i>—Number in the range 5–30; default value is 10 seconds; defines the keepalive interval; the interval must be set, and the value on the DTE should be less than the value set on the DCE
Mode	Interface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-n391dte

Description	Sets the full-status polling counter (N391) on a DTE interface. The no version restores the default value, assuming an LMI has been configured.
Syntax	<pre>frame-relay lmi-n391dte keepExchanges</pre> <pre>no frame-relay lmi-n391dte</pre> <ul style="list-style-type: none"> ■ <i>keepExchanges</i>—Number in the range 1– 255; default value is 6; number of keep exchanges to be done before requesting a full-status message. If you specify a value of 1, you receive full-status messages only.
Mode	Interface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-n392dce

Description	Sets the error threshold counter (N392) on a DCE interface. The no version removes current setting and sets the default.
Syntax	<pre>frame-relay lmi-n392dce threshold</pre> <pre>no frame-relay lmi-n392dce</pre> <ul style="list-style-type: none"> ■ <i>threshold</i>—Positive number in the range 1– 10; number of errors that will place the interface in an operationally down state; default value is 2 errors
Mode	Interface Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-n392dte

Description Sets the error threshold counter (N392) on a DTE interface. The **no** version removes current setting and sets the default.

Syntax frame-relay lmi-n392dte *threshold*
no frame-relay lmi-n392dte

- *threshold*—Positive number in the range 1–10; number of errors that will place the interface in an operationally down state; default value is 3 errors

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-n393dce

Description Sets the monitored events count (N393) on a DCE interface. The **no** version removes current setting and sets the default.

Syntax frame-relay lmi-n393dce *events*
no frame-relay lmi-n393dce

- *events*—Number in the range 1–10 events; specifies the diagnostic window used to verify link integrity; default value is 2 events (The detection of N393 errors within the window of N393 samples places the interface in an operationally down state.)

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-n393dte

Description Sets the monitored event count (N393) on a DTE interface. The **no** version removes current setting and sets the default.

Syntax frame-relay lmi-n393dte *events*
no frame-relay lmi-n393dte

- *events*—Number in the range 1–10 events; default value is 4 events; specifies the diagnostic window used to verify link integrity (the detection of N392 errors within the window of N393 samples places the interface in an operationally down state)

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-t391dte

Description Sets the link integrity verification polling timer (T391) on a DTE interface. The **no** version removes the current setting and sets the default.

Syntax frame-relay lmi-t391dte *seconds*
no frame-relay lmi-t391dte

- *seconds*—Number in the range 5–30 seconds; specifies the interval in seconds between status inquiries issued by the DTE; default value is 10 seconds

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-t392dce

Description Sets the polling verification timer (T392) on a DCE interface. The **no** version removes current setting and sets the default.

Syntax frame-relay lmi-t392dce *seconds*
no frame-relay lmi-t392dce

- *seconds*—Number in the range 5–30 seconds; specifies the expected interval in seconds between status inquiries issued by the DTE equipment; default value is 15 seconds

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frame-relay lmi-type

Description Selects the LMI type. The **no** version restores the default value.

Syntax frame-relay lmi-type *type*
no frame-relay lmi-type

- *type*—One of the following types:
 - ansi—ANSI T1.617 Annex D
 - cisco—Original Group of Four specification developed by DEC, Northern Telecom, Stratacom, and Cisco
 - q933a—ITU-T Q.933 Annex A
 - none—No management interface is used

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

Configuring Frame Relay Layer 2 Services

frame-relay policy

Description Assigns a policy list to the ingress or egress of a Frame Relay interface. If you enter this command when the policy list does not exist, the router will create a policy list with a filter rule as the default. You must specify the **input** or **output** keyword to assign the policy list to the ingress or egress of the interface. The **no** version removes the association between a policy list and an interface.

Syntax frame-relay policy { input | output } *policyName*
[statistics { enabled [baseline { enabled | disabled }] [preserve | merge] | disabled [merge] } | merge]

no frame-relay policy { input | output } [*policyName*]

- input—Applies policy to data arriving at this interface
- output—Applies policy to data leaving this interface
- *policyName*—Name of the policy; a maximum of 40 characters
- statistics—Enables or disable collection of policy routing statistics
 - enabled—Enables collection of policy routing statistics
 - baseline enabled—Enables baselining of policy routing statistics
 - baseline disabled—Disables baselining of policy routing statistics
 - preserve—Preserves existing statistics for any classifier-list that is the same for both the new and old policy attachments when you attach a new policy to an interface

- disabled—Disables collection of policy routing statistics
- merge—Enables merging of multiple policies to form a single policy

Mode Interface Configuration

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

Related Topics

- Setting a Statistics Baseline

frame-relay policy-list

Description Creates or modifies a Frame Relay policy list and accesses Policy List Configuration mode. If you execute a **frame-relay policy-list** command and type **exit**, the router creates a policy list with a filter rule as the default. Attaching this policy list to an interface filters all packets on that interface. The **no** version removes a policy list.

Syntax [no] frame-relay policy-list *policyName*

- *policyName*—Name of the policy list

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Creating Policy Lists for Frame Relay

framing

Description Specifies the framing mode used by E3 or T3 interfaces. Available modes vary by the type of interface. The **no** version restores the default for that interface.

Syntax framing *framingType*
no framing

- *framingType*—One of the following framing types:
 - E3 Frame
 - g751—Default; G.751 compliant frame
 - g832—G.832 compliant frame
 - T3
 - c-bit—Default; specifies c-bit parity framing
 - m23—Specifies M23 multiplexer framing

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

frequency

Description In RTR Configuration mode, sets the time interval between RTR operations. In SNMP Event Manager Configuration mode, sets the frequency (in seconds) at which you want MIB sampling to occur. The **no** version restores the default value.

Syntax frequency *frequencyValue*
no frequency

- *frequencyValue*—Number of seconds between RTR operations or MIB sampling operations, depending on the configuration mode; with RTR operations, for both types (echo and pathEcho), the default value is 60 seconds; with MIB sampling, the default value is 600 seconds.

Mode RTR Configuration, SNMP Event Manager Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

ftp-server enable

Description Enables the FTP server and monitors the FTP port for attempts to connect to the FTP server. The **no** version terminates the current FTP sessions and disables the FTP server.

Syntax [no] ftp-server enable

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

full-spf-always

Description Enables full SPF calculations for ISIS network changes. The **no** version restores partial route calculation (PRC) mode for SPF calculations.

Syntax [no] full-spf-always

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

global export map

Description Associates a route map with a VRF to modify and filter routes exported by the VRF to the global BGP non-VPN RIB in the parent VR. Both IPv4 and IPv6 routes are exported unless you issue the appropriate keyword to restrict exportation. The **no** version disables the exporting of routes to the global BGP non-VPN RIB.

Syntax `global export map [ipv4 | ipv6] routeMap`
`no global export map [ipv4 | ipv6]`

- `ipv4`—Specifies that only IPv4 routes are exported to the global BGP non-VPN RIB
- `ipv6`—Specifies that only IPv6 routes are exported to the global BGP non-VPN RIB
- `routeMap`—Name of a route map; string of up to 32 alphanumeric characters

Mode VRF Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

global import map

Description Associates a route map with a VRF to modify and filter routes imported by the VRF from the global BGP non-VPN RIB in the parent VR. Both IPv4 and IPv6 routes are imported unless you issue the appropriate keyword to restrict importation. The **no** version disables the importing of routes from the global BGP non-VPN RIB to the VRF RIB.

Syntax `global import map [ipv4 | ipv6] routeMap max-routes maxNumber`
`no global import map [ipv4 | ipv6]`

- `ipv4`—Specifies that only IPv4 routes are imported from the global BGP non-VPN RIB
- `ipv6`—Specifies that only IPv6 routes are imported from the global BGP non-VPN RIB
- `routeMap`—Name of a route map; string of up to 32 alphanumeric characters
- `maxNumber`—Maximum number of routes that can be imported; integer in the range 1–4294967295

Mode VRF Configuration

Release Information Command introduced in JUNOS Release 7.1.0.

graceful-restart

Description Configures hitless restart capability for OSPFv2. If high availability is active, the OSPF instance can perform a hitless restart when switching or failing over to the secondary SRP module. The **no** version disables OSPF graceful restart capability on the router.

Syntax [no] graceful-restart

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

graceful-restart helper

Description Configures the router to function as an OSPFv2 or OSPFv3 graceful restart helper router. The **no** version disables OSPF graceful restart helper mode capability on the router.

Syntax [no] graceful-restart helper

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

graceful-restart helper-abort-topology-change

Description Configures the OSPFv2 or OSPFv3 helper router to cease help to a restarting router under the specified conditions. However, the router continues to act as helper for subsequent graceful restart requests. The **no** version turns off the graceful restart helper capability.

Syntax graceful-restart helper-abort-topology-change { any | non-externals }
no graceful-restart helper-abort-topology-change

- any—Abandons the helper role when any LSA changes during the restart
- non-externals—Abandons the helper role only when any nonexternal LSA changes during the restart

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

graceful-restart notify-time

Description Specifies the estimated time for the OSPFv2 router to send purged grace LSAs over all interfaces. The **no** version returns the notify duration timer to its default value, 15 seconds.

Syntax [no] graceful-restart notify-time *notifyTime*

- *notifyTime*—Number of seconds during which the router can send purged grace LSAs over all interfaces; in the range 1–1800

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

graceful-restart restart-time

Description Specifies the estimated time for the restarting OSPFv2 router to reacquire OSPF neighbors that were fully functional prior to the restart. When this timer expires, the restarting router exits the restart procedure, originates any LSAs that were suppressed during the restart, removes any self-originated LSAs that it received from helping neighbors, runs SPF, and updates any routes in the routing table. The **no** version returns the restart duration timer to its default value, 180 seconds.

Syntax [no] graceful-restart restart-time *restartTime*

- *restartTime*—Number of seconds during which the restarting router can reacquire OSPF neighbors that were fully functional prior to the restart; in the range 1–1800

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

grace-period

Description Configures the grace period for address leases allocated from the current DHCP local address pool. When the address lease expires, the address enters the grace period, when the address continues to be unavailable to other clients and can only be reassigned to the original client. This command applies only to expired releases—to optionally apply the grace period to addresses that are *explicitly released* by a client, you must enable the **use-release-grace-period** command. The **no** version restores the default, in which no grace period is associated with the local address pool.

Syntax `grace-period days [hours [minutes [seconds]]]`
`no grace-period`

- *days*—Number of days in the grace period; in the range 0–32767
- *hours*—Number of hours in the grace period; in the range 0–23
- *minutes*—Number of minutes in the grace period; in the range 0–59
- *seconds*—Number of seconds in the grace period; in the range 0–59

Mode DHCP Local Pool Configuration

Release Information Command introduced in JUNOS Release 8.0.0.

gre destination profile

Description Configures a destination profile for dynamic GRE tunnels and enters IP Tunnel Destination Profile Configuration mode. The **no** version deletes the destination profile.

Syntax `gre destination profile profileName { [any-virtual-router] | [virtual-router virtualRouterName] }`
`no gre destination profile profileName`

- *profileName*—Name of the destination profile
- *any-virtual-router*—Specifies a default destination profile for all virtual routers; only one default destination profile can be defined in the system
- *virtualRouterName*—Name of the transport virtual router

Mode Global Configuration

Release Information Command introduced in JUNOS Release 8.2.0.

green-mark

Description Applies ToS mark value to green packets, which can be from policy actions, earlier policies, or rate-limit hierarchies. The **no** version deletes the ToS mark value.

Syntax [no] green-mark *colorMarkValue*

- *colorMarkValue*—Value of the ToS mark to be applied: in the range 0–255

Mode Color Mark Profile Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

Related Topics

- Hierarchical Rate Limits Overview
- Policy Rule Precedence

gre-tunnel classifier-list

Description Creates or modifies a GRE tunnel classifier control list. The **no** version deletes the classifier control list.

Syntax gre-tunnel classifier-list *classifierName*
 [traffic-class *className*] [color { green | yellow | red }]
 [user-packet-class *userPacketClassValue*]
 [precedence *precNum* | dsfield *dsfieldNum* | tos *tosNum*]
 no gre-tunnel classifier-list *classifierName* [*classifierNumber*]

- *classifierName*—Name of a classifier list entry
- *className*—Name of a traffic class; the router supports up to eight traffic classes
- 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*—Value of the user packet class in the range 0–15
- *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; an integer in the range 1–10000

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Creating or Modifying Classifier Control Lists for GRE Tunnel Policy Lists

gre-tunnel policy

Description Assigns a GRE tunnel policy list to an interface. If you enter the **gre-tunnel policy** command and the policy list does not exist, the router creates a policy list with no rules, the default. Attaching this policy list to an interface filters all packets on that interface. You must specify the **input** or **output** keyword to assign the policy list to the ingress or egress of the interface. The **no** version removes the association between a policy list and an interface.

Syntax `gre-tunnel policy { input | output } policyName`
`[statistics { enabled | disabled | preserve } | merge]`
`no gre-tunnel policy { input | output } [policyName]`

- **input**—Applies policy to data arriving at this interface
- **output**—Applies policy to data leaving this interface
- ***policyName***—Name of the policy; a maximum of 40 characters
- **statistics**—Enables or disables collection of policy routing statistics
 - **enabled**—Enables collection of policy routing statistics
 - **disabled**—Disables collection of policy routing statistics
 - **preserve**—Preserves existing statistics for any classifier-list that is the same for both the new and old policy attachments when you attach a new policy to an interface
- **merge**—Enables merging of multiple policies to form a single policy

Mode Interface Configuration

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

Related Topics

- Setting a Statistics Baseline

gre-tunnel policy-list

Description Creates the specified policy list and accesses Policy List Configuration mode. If you enter the **gre-tunnel policy-list** command and the policy list does not exist, the router creates a policy list with no rules, the default. Attaching this policy list to an interface filters all packets on that interface. The **no** version deletes the policy list.

Syntax `[no] gre-tunnel policy-list policyName`

- ***policyName***—Name of a policy list; string of up to 40 alphanumeric characters

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Creating Policy Lists for GRE Tunnels

group

Description From QoS Profile Configuration mode, specifies that a group scheduler node be configured for each interface of the given interface type. The **no** version removes this rule from the QoS profile.

From IKE Policy Configuration mode, assigns a Diffie-Hellman group to the IKE policy. The **no** version restores the default, 1024-bit Diffie-Hellman group.

Syntax To specify a group scheduler node for QoS:
 [no] *typeOfInterface* group *groupName* scheduler-profile *schedulerProfileName*

- *typeOfInterface*—Interface types for group scheduler nodes to be configured: atm, ethernet, serial, server-port
- *groupName*—Name of the traffic class group
- *schedulerProfileName*—Name of the scheduler profile

To specify a Diffie-Hellman group:

group { 1 | 2 | 5 }

no group

- 1—Specifies the 768-bit group
- 2—Specifies the 1024-bit group
- 5—Specifies the 1536-bit group

Mode IKE Policy Configuration, QoS Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

Related Topics

- Configuring a QoS Profile
- Configuring Shadow Nodes
- Configuring QoS for an L2TP Session
- Configuring QoS for Tunnel-Server Ports for L2TP LNS Sessions

halt

Description Stops operation on both SRP modules or on the specified SRP module. When the high availability state is active or pending, this command ensures that the router configuration, up to when you issued the **halt** command, is mirrored to the standby SRP module. There is no **no** version.



CAUTION: To prevent corruption of NVS, issue this command before you remove or power down an SRP module.

Syntax The syntax of the command depends on whether you enter it from Boot mode or Privileged Exec mode.

From Boot mode:

halt

From Privileged Exec mode:

halt [**force** | **primary-srp** [**force**] | **standby-srp** [**force**]]

- **force**—Prompts the user to confirm that the router should stop operation 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.



CAUTION: When the high availability state is active or pending, issuing the **force** keyword does not guarantee that the configuration has been mirrored; recent configuration changes may be lost if you issue the **force** keyword.

- **primary-srp**—Stops operation on primary SRP module only
- **standby-srp**—Stops operation on standby SRP module only

Mode Boot, Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

hash

Description Sets the hash algorithm in an IKE policy. The **no** version restores the default, SHA-1.

Syntax **hash** { **sha** | **md5** }
no hash

- **sha**—Specifies SHA-1 (HMAC variant) as the hash algorithm
- **md5**—Specifies MD5 (HMAC variant) as the hash algorithm

Mode IKE Policy Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hdlc dos-protection-group

Description Attaches an HDLC denial of service (DoS) protection group to an interface. The **no** version removes the attachment of the DoS protection group from the interface.

Syntax `hdlc dos-protection-group groupName`
`no hdlc dos-protection-group`

- *groupName*—Name of the DoS protection group; string of up to 31 alphanumeric characters

Mode Interface Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

hdlc down-when-looped

Description Enables loopback detection on a Cisco HDLC interface. Loopback detection is disabled by default. The **no** version disables loopback detection.

Syntax `[no] hdlc down-when-looped`

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hdlc keepalive

Description Specifies a keepalive value. The keepalive mechanism tracks the health of the connection. The **no** version turns off the keepalive feature.

Syntax `hdlc keepalive [seconds]`
`no hdlc keepalive`

- *seconds*—Keepalive timeout period in the range 0–6553 seconds; default value is 10. A value of zero (0) turns off the keepalive feature.

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hdlc shutdown

Description Stops or restarts a Cisco HDLC session. The **no** version restarts a Cisco HDLC session.

Syntax `[no] hdlc shutdown`

Mode Interface Configuration, Subinterface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hello hold-time

Description Configures the MPLS hold time, the period that a sending LSR maintains a record of link hello messages from the receiving LSR without receipt of another link hello from that LSR. The **no** version restores the default value, 15 seconds.

Syntax hello hold-time *seconds*
no hello hold-time

- *seconds*—Number of seconds, in the range 1–65535

Mode LDP Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hello interval

Description Specifies the interval between link-hello packets sent by LDP. The **no** version restores the default interval, 5 seconds.

Syntax hello interval *seconds*
no hello interval

- *seconds*—Number of seconds, in the range 1–65535

Mode LDP Profile Configuration

Release Information Command introduced in JUNOS Release 8.1.0.

hello-interval

Description Specifies the interval between hello packets that the router sends on the OSPF remote-neighbor interface. The **no** version restores the default value.

Syntax hello-interval *helloInterval*
no hello-interval

- *helloInterval*—Number in the range 1–65535 seconds; default value is 10 seconds

Mode Remote Neighbor Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

help

Description Displays basic information about the Help system. There is no **no** version.

Syntax help

Mode All modes

Release Information Command introduced before JUNOS Release 7.1.0.

hops-of-statistics-kept

Description Sets the number of hops to keep statistics for an entry. The **no** version restores the default value.

Syntax hops-of-statistics-kept [*hopsKeptValue*]
no hops-of-statistics-kept

- *hopsKeptValue*—Number of hops for which statistics are collected for a particular *pathEcho* type; default value is 16 for a *pathEcho* entry and 1 for an *echo* entry; if you omit this option, all hops found are recorded



NOTE: The E-series router supports only the *pathEcho* and *echo* types.

Mode RTR Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

host

Description Adds or modifies an entry to the host table. The **no** version removes the specified host.

Syntax `host hostname ipAddress [ftp [[userAlgorithmType] userName
[[passwordAlgorithmType] password]]] [tftp]`

`no host hostname`

- *hostname*—Hostname to add or modify; up to 20 characters
- *ipAddress*—IPv4 or IPv6 address of the host
- *ftp*—Specifies that the host is an FTP server; the default protocol if neither *ftp* nor *tftp* is specified
- *userAlgorithmType*—Type of username
 - 0—Indicates that the *userName* is unencrypted; the default
 - 8—Indicates that the *userName* is an encrypted password
- *userName*—Username used to access an FTP server (but not an NFS server); defaults to **anonymous**
- *passwordAlgorithmType*—Type of password
 - 0—Indicates that the *password* is unencrypted; the default
 - 8—Indicates that the *password* is an encrypted password
- *password*—Password used to access an FTP server (but not an NFS server); defaults to **null**
- *tftp*—Specifies that the host is a TFTP server

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hostname

Description Sets the name for the router; this hostname subsequently appears in the router CLI prompt. The **no** version removes the hostname from the router.



NOTE: In Domain Map Tunnel Configuration mode, this command has been replaced by the **clear suspicious-control-flow-detection** command and may be removed completely from Domain Map Tunnel Configuration mode in a future release.

Syntax `hostname hostname`
`no hostname`

- *hostname*—String of up to 63 characters (no spaces)

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

hotfix activate

Description Activates the specified hotfix present on the local flash card. The **no** version deactivates the specified hotfix or all currently active hotfixes. Deactivating a hotfix restores the router to the state that existed before the hotfix was activated.

Syntax `hotfix activate hfixFilename`
`no hotfix activate { hfixFilename | all }`

- *hfixFileName*—Name of a hotfix software file (.hfx) on the local file system
- `all`—Specifies that all currently active hotfixes are deactivated

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.2.0.