

# J-K-L Commands

## key

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**Description** From RADIUS Configuration mode, specifies the secret for the RADIUS authentication, accounting, dynamic-request server, or preauthentication server that is used to calculate the RADIUS authenticator field during exchanges with the RADIUS server. The **no** version removes the secret and causes the router to drop all requests for the RADIUS client.

From RADIUS Relay Configuration mode, specifies the IP address and mask of the network that will use the relay authentication or accounting server, and the secret used during exchanges between the RADIUS relay server and client. The **no** version removes the secret.

From IPsec Manual Key Configuration mode, configures a manual ISAKMP/IKE preshared key. There is no **no** version. To delete a key, use the **no** version of the **ipsec key manual** command.

**Syntax** To assign a RADIUS key:  
*key secret*  
*no key*

- *secret*—Authentication, accounting, dynamic-request, or preauthentication server secret text string used by RADIUS to encrypt the client and server authenticator field during exchanges between the router and a RADIUS server. The router encrypts PPP PAP passwords using this text string.

To assign a RADIUS relay key:  
*key ipAddress ipMask secret*

*no key ipAddress ipMask*

- *ipAddress*—IP address for client network
- *ipMask*—IP mask for the client network
- *secret*—Text string; up to 32 characters

To assign an ISAKMP/IKE key:  
*key keyString*

*no key*

- *keyString*—Key value in ASCII format; up to 200 characters

**Mode** IPsec Manual Key Configuration, RADIUS Configuration, RADIUS Relay Configuration

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

### Related Topics

- Configuring RADIUS-Based Mirroring

## key-string

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**Description** Manually configures a 1024-bit or 2048-bit ISAKMP/IKE public key that a remote peer uses for RSA authentication without the need for a digital certificate. The key string represents the public key hexadecimal data that includes the ASN.1 object identifier and sequence tags for RSA encryption. There is no **no** version. To remove a peer public key from the router, use the **no** version of the **ipsec key pubkey-chain rsa** command.

**Syntax** `key-string keyStringData`

- *keyStringData*—Alphanumeric string with a maximum length of 1999 characters; delimited by the first character of the string, which must be repeated at the end of the string and must not occur anywhere else in the string

**Mode** IPsec Peer Public Key Configuration

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

## l2c

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**Description** Accesses the L2C Configuration (config-l2c) mode for ANCP. The **no** version exits the L2C Cconfiguration mode and removes all ANCP configuration.

**Syntax** `[ no ] l2c`

**Mode** Global Configuration

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

## l2c end-user-id

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**Description** Creates the GSMP output label associated with the interface. In addition to the label, this command also specifies the access node using the **neighbor** keyword. The **no** version removes the output label association.

**Syntax** `l2c end-user-id idString neighbor neighborName`  
`no l2c end-user-id idString`

- *idString*—String to identify the GSMP label
- *neighborName*—Name of the neighboring access node

**Mode** Interface Configuration, Subinterface Configuration

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

## I2c ip listen

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**Description** Creates a listening TCP socket at the virtual router within the ANCP context. ANCP needs TCP sockets so that neighbors can open GSMP sessions. The **no** version removes the listening TCP socket and stops any new sessions from being established. The **no** version does not terminate any existing GSMP sessions.

**Syntax** [ no ] I2c ip listen

**Mode** Global Configuration

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

## I2c ip oif

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**Description** Creates an IGMP session at the virtual router within the context. ANCP needs IGMP sessions so it can convey OIF mapping events to the appropriate ANCP neighbor. The **no** version removes the IGMP session.

**Syntax** [ no ] I2c ip oif

**Mode** Global Configuration

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

## I2c line-configuration

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**Description** Generates a GSMP port management message to the access node for the purpose of configuring a DSL profile string on the specified neighbor interface. There is no **no** command.

**Syntax** I2c line-configuration interface *interfaceType* *interfaceSpecifier* *profileName*

- *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*
- *profileName*—Name of profile to be used in the line configuration (port management) message

**Mode** Global Configuration

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

## I2c max-branches

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<b>Description</b>	Specifies the maximum number of branches the ANCP end user can have. The <b>no</b> version returns the maximum number of branches to its default value (unlimited branches).
<b>Syntax</b>	<pre>[ no ] I2c max-branches <i>maxBranches</i></pre> <ul style="list-style-type: none"> <li>■ <i>maxBranches</i>—Maximum number of branches allowed for the ANCP end user in the range 1–64000</li> </ul>
<b>Mode</b>	Interface Configuration, Subinterface Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## I2c oam

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<b>Description</b>	Triggers the access node to run a local loopback test on the specified interface. There is no <b>no</b> version.
<b>Syntax</b>	<pre>I2c oam { neighbor <i>neighborName</i> end-user-id <i>endUserId</i>   interface <i>interfaceType</i> <i>interfaceSpecifier</i> } [ count <i>countValue</i> ] [ timeout <i>timeoutValue</i> ]</pre> <ul style="list-style-type: none"> <li>■ <i>neighborName</i>—Name of the neighbor</li> <li>■ <i>endUserId</i>—Output ANCP label</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>countValue</i>—Number of local loopback messages</li> <li>■ <i>timeoutValue</i>—Time (in seconds) for the access node to wait for a loopback response from the neighbor</li> </ul>
<b>Mode</b>	Privileged Exec, User Exec
<b>Release Information</b>	Command introduced in JUNOS Release 7.2.0.

## I2c peer-attachment-id

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<b>Description</b>	Creates the GSMP input label associated with the interface. The <b>no</b> version removes the input label association.
<b>Syntax</b>	<pre>I2c peer-attachment-id <i>idString</i></pre> <pre>no I2c peer-attachment-id</pre> <ul style="list-style-type: none"> <li>■ <i>idString</i>—String to identify the GSMP label</li> </ul>
<b>Mode</b>	Interface Configuration, Subinterface Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## I2tp checksum

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**Description** Enables the generation of a UDP data integrity checksum in data packets sent to an L2TP peer. The default setting is disabled. The **no** version disables the generation of the checksums.

**Syntax** [ no ] I2tp checksum

**Mode** Global Configuration

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

## I2tp classifier-list

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

**Syntax** I2tp classifier-list *classifierName* [ traffic-class *trafficClassName* ]  
[ color { green | yellow | red } ] [ user-packet-class *userPacketClassValue* ]  
no I2tp classifier-list *classifierName* [ *classifierNumber* ]

- *classifierName*—Name of the classifier control list entry
- *classifierNumber*—Index of the classifier list entry; use the **show classifier-list** command to see a list of entries with index numbers
- *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 class value

**Mode** Global Configuration

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

**Related Topics**

- Creating or Modifying Classifier Control Lists for L2TP Policy Lists

## I2tp destination lockdown-test

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**Description** Configures L2TP to test locked-out destinations to verify whether a destination is available before it is returned to service. The **no** version restores the default behavior, in which locked-out destinations are not tested.

**Syntax** [ no ] I2tp destination lockdown-test

**Mode** Global Configuration

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

## I2tp destination lockout-timeout

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**Description** Specifies the amount of time an L2TP destination remains in the lockout state after the destination becomes unavailable. When the timeout period expires, the router either begins the lockout test procedure (if configured to do so) or immediately returns the destination to service. The **no** version restores the default lockout timeout value.

**Syntax** I2tp destination lockout-timeout *timeOutValue*  
 no I2tp destination lockout-timeout

- *timeOutValue*—Number of seconds in the range 60–3600; default is 300 seconds (5 minutes)

**Mode** Global Configuration

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

## I2tp destination profile

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**Description** Creates or accesses a destination profile that defines the location of a LAC. The **no** version removes the L2TP destination profile.

**Syntax** I2tp destination profile { *profileName* [ [ virtual-router *vrName* ]  
 ip address *ipAddress* ] | [ virtual-router *vrName* ] ip address *ipAddress* }  
 no I2tp destination profile { *profileName* |  
 [ virtual-router *vrName* ] ip address *ipAddress* }

- *profileName*—Name of the L2TP destination profile
- *vrName*—Name of the virtual router to be used to reach the destination (that is, the LAC). If you do not specify a virtual router, the current virtual router context is used.
- *ipAddress*—IP address to be used to reach the destination

**Mode** Global Configuration

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

## I2tp destruct-timeout

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**Description** Specifies the maximum time for which the router maintains dynamic destinations, tunnels, and sessions that have terminated. If resources are low, the router will replace the terminated objects with new requests. The **no** version restores the default value, 600 seconds.

**Syntax** I2tp destruct-timeout *seconds*  
no I2tp destruct-timeout

- *seconds*—Time in the range 10–3600 seconds (1 hour)

**Mode** Global Configuration

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

## I2tp dial-out connecting-timer-value

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**Description** Sets the maximum amount of time allowed for successful establishment of an L2TP dial-out session. The **no** version restores the default value, 30 seconds.

**Syntax** [ no ] I2tp dial-out connecting-timer-value *connectingTime*

- *connectingTime*—Range 30–3600 seconds

**Mode** Global Configuration

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

## I2tp dial-out dormant-timer-value

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**Description** Defines how long the dial-out session stays in the dormant state waiting for a new trigger after the associated L2TP outgoing call is ended. The **no** version set the dormant timer to the default value, 300 seconds (5 minutes).

**Syntax** [ no ] I2tp dial-out dormant-timer-value *dormantTime*

- *dormantTime*—Range 0–3600 seconds

**Mode** Global Configuration

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

## I2tp dial-out max-buffered-triggers

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**Description** Sets the maximum number of buffered trigger packets held for any dial-out session pending the successful establishment of the L2TP session. The **no** version set the number of trigger buffers to the default value, 0.

**Syntax** [ no ] I2tp dial-out max-buffered-triggers *maxBuffers*

- *maxBuffers*—Range 0–50 buffered packets

**Mode** Global Configuration

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

## I2tp dial-out session delete

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**Description** Deletes a dial-out session. There is no **no** version.

**Syntax** I2tp dial-out session delete *triggerIpAddress*

- *triggerIpAddress*—Target IP address of the session

**Mode** Privileged Exec

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

## I2tp dial-out session reset

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**Description** Resets the state of a dial-out session by forcing it to the dormant state. There is no **no** version.

**Syntax** I2tp dial-out session reset *triggerIpAddress*

- *triggerIpAddress*—Trigger IP address of the session

**Mode** Privileged Exec

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



## I2tp dial-out target

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**Description** Defines an L2TP dial-out target that enables the creation of a dial-out session. The **no** version removes the L2TP dial-out route or target.

**Syntax** I2tp dial-out target *ipAddress ipAddressMask domainName profile profileName*  
no I2tp dial-out target *ipAddress ipAddressMask*

- *ipAddress*—IP address of the target
- *ipAddressMask*—IP address mask of the target
- *domainName*—Domain name to be used in the outgoing call Access-Request message
- *profileName*—Name of profile to be used in the creation of the interface stack

**Mode** Global Configuration

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

## I2tp disable calling-number-avp

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**Description** Prevents the E-series LAC from sending the Calling Number attribute value pair (AVP) in incoming-call-request (ICRQ) packets. The **no** version enables sending of the Calling Number AVP, the default setting.

**Syntax** [ no ] I2tp disable calling-number-avp

**Mode** Global Configuration

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

## I2tp disable challenge

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**Description** Disables the generation of local tunnel authentication challenges. The **no** version enables local challenge generation, which is the default setting.

**Syntax** [ no ] I2tp disable challenge

**Mode** Global Configuration

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

## I2tp disconnect-cause

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**Description** Enables an E-series LNS to generate, for all L2TP sessions, a PPP Disconnect Cause Code attribute value pair (AVP) and include it in all L2TP Call-Disconnect-Notify (CDN) messages that it sends to an LAC. This action provides a mechanism for the LAC to obtain information about the cause of a session disconnection. The **no** version disables generation of the PPP Disconnect Cause Code AVP, which is the default setting.

**Syntax** [ no ] I2tp disconnect-cause

**Mode** Global Configuration

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

## I2tp drain

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**Description** Prevents the creation of new destinations, tunnels, and sessions for the router. This command works in conjunction with the **I2tp shutdown** command. Both commands affect the status of the administrative state of L2TP on the router; the **I2tp drain** command sets the administrative state to drain. The **no** version allows the creation of new destinations, tunnels, and sessions for the router.

**Syntax** [ no ] I2tp drain

**Mode** Global Configuration

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

## I2tp drain destination

---

**Description** Prevents the creation of new tunnels and sessions at a destination. This command works in conjunction with the **I2tp shutdown destination** command. Both commands affect the status of the administrative state of L2TP for the destination; the **I2tp drain destination** command sets the administrative state to drain. The **no** version allows the creation of new tunnels and sessions at a destination.

**Syntax** [ no ] I2tp drain destination { *destinationName* | [ virtual-router *vrName* ] ip *ipAddress* }

- *destinationName*—Name the router assigns to the LNS
- *vrName*—Name of the virtual router on which the destination exists
- *ipAddress*—IP address of the LNS

**Mode** Global Configuration

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

## I2tp drain tunnel

---

**Description** Prevents the assignment of new sessions to a tunnel. This command works in conjunction with the **I2tp shutdown tunnel** command. Both commands affect the status of the administrative state of L2TP for the tunnel; the **I2tp drain tunnel** command sets the administrative state to drain. The **no** version allows the assignment of new sessions to a tunnel.

**Syntax** [ no ] I2tp drain tunnel { *destinationName* |  
[ virtual-router *vrName* ] ip *ipAddress* *tunnelName* }  
■ *destinationName*—Name the router assigns to the LNS  
■ *vrName*—Name of the virtual router on which the tunnel exists  
■ *ipAddress*—IP address of the LNS  
■ *tunnelName*—Name of the tunnel

**Mode** Global Configuration

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

## I2tp failover-resync

---

**Description** Configures the global L2TP peer resynchronization method that an L2TP failed endpoint uses to resynchronize with its peer non-failed endpoint. This setting can be overridden by a peer resynchronization method that is configured by either an L2TP host profile or an AAA domain map tunnel configuration. The **no** version disables peer resynchronization. The **default** version restores the default peer resynchronization method, failover-protocol-fallback-to-silent-failover.

**Syntax** I2tp failover-resync { failover-protocol | failover-protocol-fallback-to-silent-failover |  
silent-failover | disable }  
no I2tp 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; this is the default setting  
■ silent-failover—Specifies the silent failover method  
■ disable—Disables peer resynchronization

**Mode** Global Configuration

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

## I2tp fail-over-within-preference

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**Description** Enables tunnel selection within a preference level. The **no** version restores the default behavior, which is to drop down a preference level when a connection attempt has failed.

**Syntax** [ no ] I2tp fail-over-within-preference

**Mode** Global Configuration

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

## I2tp ignore-receive-data-sequencing

---

**Description** Suppresses sequence number checking for data packets received on all L2TP tunnels in the router. This setting affects only packets received on a tunnel, not packets sent on a tunnel. The L2TP LAC still inserts sequence numbers into data packets if the LAC receives packets from the LNS that contain sequence numbers. The **no** version restores the default, which causes the router to check the sequence numbers in data packets that it receives on L2TP tunnels.



**NOTE:** If you are using IP reassembly, we recommend that you set up the router to ignore sequence numbers in received data packets. Because IP reassembly may reorder L2TP packets, out-of-order packets may be dropped if sequence numbers are being used on L2TP data packets.

**Syntax** [ no ] I2tp ignore-receive-data-sequencing

**Mode** Global Configuration

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

## I2tp ignore-transmit-address-change

---

**Description** Specifies that E-series routers ignore address changes in Start-Control-Connection-Reply (SCCRP) control packets received from the remote endpoint. If you do not include a keyword, the router ignores the entire address change. The **no** version restores the default, which causes the router to accept address changes in response to SCCRP packets.

**Syntax** [ no ] I2tp ignore-transmit-address-change [ ip-address | udp-port ]

- ip-address—Ignores only IP address changes
- udp-port—Ignores only UDP port number changes

**Mode** Global Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
**ip-address** and **udp-port** keywords added in JUNOS Release 7.1.0.

## I2tp policy

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**Description** Assigns an L2TP policy list to a profile, which then assigns the policy to an interface. If you enter the **I2tp 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 a profile.

**Syntax** I2tp policy { input | output } *policyName* [ statistics { enabled | disabled } [ merge ]  
no I2tp policy { input | output }

- input—Applies policy to data arriving at the interface
- output—Applies policy to data leaving the interface
- *policyName*—Name of the policy; 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
- merge—Enables merging of multiple policies to form a single policy

**Mode** Profile 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

## I2tp policy-list

---

**Description** Creates or modifies an L2TP policy list. If you enter an **I2tp policy-list** command and type **exit**, the router creates a policy list with no rules. When a policy list does not have rules, the router inserts a default filter rule. Attaching this policy list to an interface filters all packets on that interface. The **no** version removes a policy list.

**Syntax** [ no ] I2tp 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 L2TP

## I2tp policy-parameter hierarchical

---

**Description** Specifies a parameter value for L2TP interfaces. The **no** version removes the policy parameter and its contents.

**Syntax** I2tp policy-parameter hierarchical *parameterName* { *nodeValue* | atm | atm-vc | atm-vp  
vp*Value* | ethernet | fr-vc | forwarding | svlan *svlanValue* | vlan }  
no policy-parameter *parameterName*

- *parameterName*—Name of policy parameter
- *nodeValue*—Aggregation node number in the range 1–65535
- *vpValue*—ATM VPI number in the range 0–255
- *svlanValue*—SVLAN ID number in the range 0–4095

**Mode** Interface Configuration

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

**Related Topics**

- Creating a Classifier Group for a Policy List

## I2tp policy-parameter reference-rate

---

**Description** Creates an L2TP policy parameter for a reference rate; creates a global parameter if it does not exist. The **no** version removes the policy parameter and its contents; if used with the **increase** keyword, decreases the value.

**Syntax** I2tp policy-parameter reference-rate *parameterName* [ increase ] *value*  
no I2tp policy-parameter reference-rate *parameterName*

- *parameterName*—Name of policy parameter up to 40 characters
- increase—Increments the existing reference rate value
- *value*—Value of the reference rate parameter, in the range 0–4292967295

**Mode** Profile Configuration

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

**Related Topics**

- Creating a Classifier Group for a Policy List

## I2tp reject-transmit-address-change

---

**Description** Specifies that E-series routers reject address changes in Start-Control-Connection-Reply (SCCRP) control packets received from the remote endpoint. If you do not include a keyword, the router rejects the entire address change. The **no** version restores the default, which causes the router to accept address changes in response to SCCRP packets.

**Syntax** [ no ] I2tp reject-transmit-address-change [ ip-address | udp-port ]

- ip-address—Rejects only IP address changes
- udp-port—Rejects only UDP port number changes

**Mode** Global Configuration

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

## I2tp retransmission

---

**Description** Sets the number of retransmission retries, and allows you to apply the retry count to established and/or unestablished tunnels. If you do not include a keyword, the router applies the retry count to all tunnels. The **no** version resets the number of retransmissions to the default value, 5.

**Syntax** I2tp retransmission *retries* [ established | not-established ]  
no I2tp retransmission [ *retries* ] [ established | not-established ]

- *retries*—Number in the range 2–7
- established—Applies the retry count only to established tunnels
- not-established—Applies the retry count only to tunnels that are not established

**Mode** Global Configuration

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

## I2tp rx-connect-speed-when-equal

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**Description** Generates the L2TP receive (RX) speed AVP when the RX and TX speeds are equal. The **no** version disables generation of the RX speed AVP when the RX and TX speeds are equal.

**Syntax** [ no ] I2tp rx-connect-speed-when-equal

**Mode** Global Configuration

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

## I2tp shutdown

---

**Description** Closes all destinations, tunnels, and sessions and prevents the creation of new destinations, tunnels, and sessions for the router. This command works in conjunction with the **I2tp drain** command. Both commands affect the status of the administrative state of L2TP on the router; the **I2tp shutdown** command sets the administrative state to disabled. The **no** version enables the creation of new destinations, tunnels, and sessions for the router.

**Syntax** [ no ] I2tp shutdown

**Mode** Global Configuration

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

## I2tp shutdown destination

---

**Description** Closes all tunnels and sessions at a destination, and prevents the creation of new tunnels and sessions at that destination. This command works in conjunction with the **I2tp drain destination** command. Both commands affect the status of the administrative state of L2TP on the destination; the **I2tp shutdown destination** command sets the administrative state to disabled. The **no** version enables the creation of new tunnels and sessions at that destination.

**Syntax** [ no ] I2tp shutdown destination { *destinationName* |  
[ virtual-router *vrName* ] ip *ipAddress* }

- *destinationName*—Name the router assigns to the LNS
- *vrName*—Name of the virtual router on which the destination exists
- *ipAddress*—IP address of the LNS

**Mode** Global Configuration

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

## I2tp shutdown session

---

**Description** Closes a specific session. The **no** version has no effect because all L2TP sessions are dynamic and cannot be restarted after they have been shut down.

**Syntax** [ no ] I2tp shutdown session { *destinationName* |  
[ virtual-router *vrName* ] ip *ipAddress* *sessionName* }

- *destinationName*—Name that the router assigns to the LNS
- *vrName*—Name of the virtual router on which the destination exists
- *ipAddress*—IP address of the LNS
- *sessionName*—Name of the session

**Mode** Global Configuration

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



## I2tp shutdown tunnel

---

**Description** Closes all sessions in a tunnel, and prevents the creation of new sessions in that tunnel. This command works in conjunction with the **I2tp drain tunnel** command. Both commands affect the status of the administrative state of L2TP on the tunnel; the **I2tp shutdown tunnel** command sets the administrative state to disabled. The **no** version enables the creation of new sessions in that tunnel.

**Syntax** [ no ] I2tp shutdown tunnel { *destinationName* |  
[ virtual-router *vrName* ] ip *ipAddress* *tunnelName* }  
■ *destinationName*—Name the router assigns to the LNS  
■ *vrName*—Name of the virtual router on which the tunnel exists  
■ *ipAddress*—IP address of the LNS  
■ *tunnelName*—Name of the tunnel

**Mode** Global Configuration

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

## I2tp switch-profile

---

**Description** Creates and names an L2TP tunnel switch profile. This command accesses L2TP Tunnel Switch Profile Configuration mode, from which you can define the L2TP tunnel switching behavior for the interfaces to which this profile is assigned. The **no** version removes the named tunnel switch profile from the router.

**Syntax** [ no ] I2tp switch-profile *profileName*  
■ *profileName*—Name of the tunnel switch profile; a string of up to 64 alphanumeric characters

**Mode** Global Configuration

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

## I2tp tunnel default-receive-window

---

**Description** Configures the default L2TP receive window size (RWS) for a tunnel on both the LAC and the LNS. The RWS is the number of packets that the peer can transmit without receiving an acknowledgment from the router. This command affects only those tunnels configured on the router after the command is issued; it has no effect on previously configured tunnels. The **no** version restores the default behavior, in which the router chooses the default RWS.

**Syntax** I2tp tunnel default-receive-window *receiveWindowSize*  
no I2tp tunnel default-receive-window

- *receiveWindowSize*—Default receive window size, in packets; currently, the only supported value is 4

**Mode** Global Configuration

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

## I2tp tunnel idle-timeout

---

**Description** Configures the tunnel idle-timeout value. Creates persistent tunnels by setting the value to 0. There is no **no** version.

**Syntax** I2tp tunnel idle-timeout [ *timeOutValue* ]

- *timeOutValue*—Number in the range 0–86400 seconds

**Mode** Global Configuration

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

## I2tp tunnel short-drain-timeout

---

**Description** Configures the amount of time a disconnected LAC L2TP tunnel waits (the drain timeout) before restarting after a restart request is received. The **no** version restores the default setting.

**Syntax** I2tp tunnel short-drain-timeout [ *timeOutValue* ]  
no I2tp tunnel short-drain-timeout

- *timeOutValue*—Short drain timeout in seconds, in the range 0–31; default value is 2 seconds

**Mode** Global Configuration

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

## I2tp tunnel-switching

---

<b>Description</b>	Enables tunnel switching chassis-wide. The <b>no</b> version restores the default, disabling tunnel switching.
<b>Syntax</b>	[ no ] I2tp tunnel-switching
<b>Mode</b>	Global Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## I2tp tunnel test

---

<b>Description</b>	Allows you to force the establishment of a tunnel in order to verify the tunnel configuration and to verify connectivity. There is no <b>no</b> version.
<b>Syntax</b>	I2tp tunnel test <i>authenticateName</i> [ <i>tunnelName</i> ] <ul style="list-style-type: none"><li>■ <i>authenticateName</i>—Authenticate name used to look up tunnel test parameters</li><li>■ <i>tunnelName</i>—Name of the tunnel to be tested</li></ul>
<b>Mode</b>	Privileged Exec
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## I2tp unlock destination

---

<b>Description</b>	Forces L2TP to immediately unlock the specified L2TP destination and return the destination to the available state. Any remaining lockout time and the lockout test setting (if configured) are not taken into account. There is <b>no</b> no version.
<b>Syntax</b>	I2tp unlock destination { <i>destinationName</i>   [ virtual-router <i>vrName</i> ] ip <i>ipAddress</i> } <ul style="list-style-type: none"><li>■ <i>destinationName</i>—Name of the L2TP destination</li><li>■ <i>vrName</i>—Name of the virtual router on which the destination exists</li><li>■ <i>ipAddress</i>—IP address of the destination</li></ul>
<b>Mode</b>	Privileged Exec (at privilege level 10 or higher)
<b>Release Information</b>	Command introduced in JUNOS Release 7.2.0.

## I2tp unlock-test destination

---

**Description** Forces L2TP to disregard any remaining lockout time and immediately begin the lockout test procedure for the specified destination. If lockout testing is not enabled, this command immediately unlocks the destination. There is **no** no version.

**Syntax** `I2tp unlock-test destination { destinationName | [ virtual-router vrName ] ip ipAddress }`

- *destinationName*—Name of the L2TP destination
- *vrName*—Name of the virtual router on which the destination exists
- *ipAddress*—IP address of the destination

**Mode** Privileged Exec (at privilege level 10 or higher)

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

## I2tp weighted-load-balancing

---

**Description** Allows you to use a weighted load balancing scheme for session distribution. The **no** version restores the default behavior, wherein the session load of a chassis is distributed evenly across all tunnels defined to be at the same preference level.

**Syntax** `[ no ] I2tp weighted-load-balancing`

**Mode** Global Configuration

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

## I2vpn control-word

---

**Description** Indicates that the local preference is to use the control word for the layer 2 packets encapsulated in the MPLS packets that are sent to the remote PE router. The **no** version indicates that the local preference is to not use the control word for the layer 2 packets encapsulated in the MPLS packets that are sent to the remote PE router. The **default** version accepts the preference determined by the interface stack on which the MPLS interface is stacked.

**Syntax** `[ no | default ] I2vpn I2VpnName control-word`

- *I2VpnName*—Name of the L2VPN instance

**Mode** Global Configuration

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

### Related Topics

- Configuring an L2VPN Instance

## I2vpn encapsulation-type

---

**Description** Creates an L2VPN instance and configures the encapsulation type for interfaces in that L2VPN instance. The **no** version removes the L2VPN instance.

**Syntax** `I2vpn I2VpnName encapsulation-type { atm-aal5-vcc | atm-vcc-cell | cisco-hdlc | ethernet | frame-relay | ppp | vlan }`

`no I2vpn I2VpnName`

- *I2VpnName*—Name of the L2VPN instance
- atm-aal5-vcc—Specifies ATM AAL5 VCC encapsulation
- atm-vcc-cell—Specifies ATM VCC Cell encapsulation
- cisco-hdlc—Specifies Cisco HDLC encapsulation
- ethernet—Specifies Ethernet encapsulation
- frame-relay—Specifies Frame-Relay encapsulation
- ppp—Specifies PPP encapsulation
- vlan—Specifies VLAN encapsulation

**Mode** Global Configuration

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

**Related Topics**

- Configuring an L2VPN Instance

## I2vpn local-site-id remote-site-id

---

**Description** Configures a layer 2 interface as a member of a layer 2 VPN by specifying local and remote customer site IDs. The **no** version removes the interface as a member of the layer 2 VPN.

**Syntax** `I2vpn I2VpnName local-site-id localSiteId remote-site-id remoteSiteId`

`no I2vpn I2VpnName`

- *I2VpnName*—Name of the L2VPN instance
- *localSiteId*—Numerical identifier for the local site in the L2VPN, in the range 1–65535
- *remoteSiteId*—Numerical identifier for the remote site in the L2VPN, in the range 1–65535

**Mode** Interface Configuration, Subinterface Configuration

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

**Related Topics**

- Configuring Customer-facing Interfaces in the L2VPN Instance

## l2vpn rd

---

**Description** Specifies the unique two-part route distinguisher for the L2VPN instance. Once configured, you cannot change or remove the route distinguisher. There is no **no** version.

**Syntax** `l2vpn l2VpnName rd distinguisher`

- *l2VpnName*—Name of the L2VPN instance
- *distinguisher*—Unique two-part identifier of the format *number1:number2* where:
  - *number1*—AS number or an IP address
  - *number2*—Unique integer; 32 bits if *number1* is an AS number; 16 bits if *number1* is an IP address

**Mode** Global Configuration

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

**Related Topics**

- [Configuring an L2VPN Instance](#)

## I2vpn route-target

---

**Description** Creates or adds to a list of L2VPN extended communities that the router uses to determine which routes are imported by the specified L2VPN instance. The **no** version removes a route target from the specified list.

**Syntax** [ no ] I2vpn I2VpnName route-target { import | export | both } *extendedCommunity*

- *I2VpnName*—Name of the L2VPN instance
- **import**—Adds the route target to the import list for the specified L2VPN instance; the L2VPN accepts only routes that have at least one route target that matches a route target in the import list
- **export**—Adds the route target to the export list for the specified L2VPN instance; all routes advertised from this L2VPN are associated with the route targets in the export list; at least one route target in the export list must match a route target in the import list of a L2VPN receiving the route for the route to be accepted by the L2VPN.
- **both**—Adds the route target to both the import list and export list for the specified L2VPN instance; recommended setting for an L2VPN instance
- *extendedCommunity*—Two-part number of the format *number1:number2* that identifies an extended community of L2VPNs where:
  - *number1*—AS number or an IP address
  - *number2*—Unique integer; 32 bits if *number1* is an AS number; 16 bits if *number1* is an IP address

**Mode** Global Configuration

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

### Related Topics

- [Configuring an L2VPN Instance](#)

## I2vpn sequencing

---

**Description** Specifies that the local preference is to include nonzero sequence numbers with the control word, enabling the remote PE to detect out-of-order packets. This command has no effect if no control word is sent in the packets. The router always accepts zero sequence numbers and checks the order of nonzero sequence numbers of MPLS packets received from the remote PE. Any out of order packets are dropped, regardless of whether sequencing is configured. The **no** version specifies that the sequencing number in the control word is set to zero, instructing the remote PE router to not attempt to detect out-of-order packets; has no effect if no control word is sent in the packets. The **default** version accepts the preference determined by the interface stack on which the MPLS shim interface is stacked.

**Syntax** [ no | default ] I2vpn *I2VpnName* sequencing

- *I2VpnName*—Name of the L2VPN instance

**Mode** Global Configuration

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

### Related Topics

- Configuring an L2VPN Instance

## I2vpn site-name site-id

---

**Description** Configures a name and a unique site identifier for a customer site that belongs to the specified L2VPN instance. In an L2VPN configuration, each customer site is represented by one or more customer edge (CE) devices located at the edge of the customer's network. The **no** version removes the site name and site identifier from the L2VPN instance.

**Syntax** [ no ] I2vpn *I2VpnName* site-name *siteName* site-id *siteId*

- *I2VpnName*—Name of the L2VPN instance
- *siteName*—Name of the site; string of up to 128 alphanumeric characters
- *siteId*—Numerical identifier for the site, in the range 1–65535; must be unique across the L2VPN domain

**Mode** Global Configuration

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

### Related Topics

- Configuring an L2VPN Instance



## l2vpn site-range

---

**Description** Configures the maximum number of customer sites that can participate in the specified L2VPN. In an L2VPN configuration, each customer site is represented by a customer edge (CE) device located at the edge of the customer's network. The **no** version restores the default site range, 1.

**Syntax** `l2vpn l2VpnName site-range siteRange`  
`no l2vpn l2VpnName site-range`

- *l2VpnName*—Name of the L2VPN instance
- *siteRange*—Maximum number of sites that can participate in the L2VPN domain, in the range 1–65535; default value is 1

**Mode** Global Configuration

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

**Related Topics**

- [Configuring an L2VPN Instance](#)

## lACP

---

**Description** Configures whether an Ethernet link in an IEEE 802.3ad link aggregation group (LAG) bundle participates actively or passively in the Link Aggregation Control Protocol (LACP). LACP controls the transmission of protocol data units (PDUs) to exchange information between partner links in a LAG bundle. By default, Ethernet links do not send LACP PDUs. The **no** version restores the default behavior.

**Syntax** `lACP { active | passive }`  
`no lACP`

- *active*—Causes the Ethernet link to always transmit LACP PDUs, regardless of whether its partner link is set to active or passive LACP participation
- *passive*—Causes the Ethernet link to transmit LACP PDUs only when it receives LACP PDUs from its partner link

**Mode** Interface Configuration

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

## lacp port-priority

---

**Description** Sets the priority for an Ethernet member link, also known as an Ethernet port, in an IEEE 802.3ad link aggregation group (LAG) bundle. The member link with the lowest numerical priority value has the highest priority. The Ethernet member link with the highest priority is selected first to join the LAG bundle. The **no** version restores the default priority value, 32768.

**Syntax** lacp port-priority *portPriority*  
no lacp port-priority

- *portPriority*—Priority value; integer in the range 0–65535; default value is 32768

**Mode** Interface Configuration

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

## lag dos-protection-group

---

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

**Syntax** lag dos-protection-group *groupName*  
no lag 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.

## lease

---

**Description** Specifies the time period for which the supplied IP address is valid. The **no** version restores the default lease time, 30 minutes.



**NOTE:** Ensure that DHCP clients have a minimum lease of 120 minutes before you begin a unified in-service software upgrade to prevent unwanted lease expirations due to the length of the unified ISSU process.

---

**Syntax** `lease { days [ hours [ minutes [ seconds ] ] ] | infinite }`  
`no lease`

- *days*—Number of days for which the IP address is valid; in the range 0–32768
- *hours*—Number of hours for which the IP address is valid in the range 0–24
- *minutes*—Number of minutes for which the IP address is valid; in the range 0–60
- *seconds*—Number of seconds for which the IP address is valid; in the range 0–60
- *infinite*—Assigns a lease that does not expire

**Mode** DHCP Local Pool Configuration

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

## license bfd

---

**Description** Specifies the Bidirectional Forwarding Detection (BFD) license provided by your sales representative or Juniper Networks Customer Service. The **no** version disables the license.

**Syntax** `license bfd licenseKey`  
`no license bfd`

- *licenseKey*—Unique string of up to 15 alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license b-ras

---

**Description** Specifies the B-RAS license provided by your sales representative or Juniper Networks Customer Service. Depending on the license purchased, the router supports up to 2,000, 4,000, 8,000, 16,000, or 20,000 authenticated PPP or SRC sessions. The **no** version disables the license.

**Syntax** `license b-ras licenseKey`  
`no license b-ras`

- *licenseKey*—Unique string of up to 15 alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license firewall maximum-virtual-routers

---

**Description** Specifies the firewall license key provided by your sales representative or Juniper Networks Customer Service. Firewall licensing is enforced according to a tiered structure based on the number of VR/VRF instances you can configure for enhanced firewall. Contact your sales representative or Juniper Networks Customer Service for details. The **no** version disables the license.

**Syntax** `license firewall maximum-virtual-routers licenseKey`  
`no license firewall maximum-virtual-routers`

- *licenseKey*—Unique string of alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license ipsec-tunnels

---

**Description** Specifies the IPSec license key provided by your sales representative or Juniper Networks Customer Service. Depending on the license purchased, the router supports up to 5,000, 7,500, or 10,000 tunnels per chassis. The **no** version disables the license.

**Syntax** `license ipsec-tunnels licenseKey`  
`no license ipsec-tunnels`

- *licenseKey*—Unique string of alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license ipv6

---

**Description** Specifies the IPv6 license key provided by your sales representative or Juniper Networks Customer Service. The **no** version disables the license.

**Syntax** `license ipv6 licenseKey`  
`no license ipv6`

- *licenseKey*—Unique string of alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license l2tp-session

---

**Description** Specifies the L2TP license key provided by your sales representative or Juniper Networks Customer Service. You can use the license on ERX-1440 routers, E120 routers, and E320 routers to increase the number of supported L2TP sessions from 16,000 to 32,000. The **no** version removes the license.



**NOTE:** This command is deprecated and might be removed completely in a future release.

JUNOS software no longer requires you to configure a license to enable support for 32,000 L2TP sessions. The ERX-1440 routers, E120 routers, and E320 routers support 32,000 L2TP sessions by default; all other models support a maximum of 16,000 L2TP sessions.

Although the **license l2tp-session** command remains in the CLI, the command has no effect on the actual enforced limit.

**Syntax** `license l2tp-session licenseKey`  
`no license l2tp-session`

- *licenseKey*—Unique string of alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license mobile-ip home-agent

---

**Description** Configures the license key to enable a home agent. The **no** version does not change any existing Mobile IP configurations such as deleting the existing bindings or preventing any new registrations, but disables the license key. You cannot modify, but only delete, the Mobile IP configurations after enabling the **no** version. For example, if you disable the home agent and delete all existing bindings, you cannot re-enable it until a valid license is provided.

**Syntax** license mobile-ip home-agent *licenseKey*  
no license mobile-ip home-agent

- *licenseKey*—Unique alphanumeric license key, up to a maximum of 16 alphanumeric characters, to enable a Mobile IP home agent configuration

**Mode** Global Configuration

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

## license nat

---

**Description** Specifies the NAT license key provided by your sales representative or Juniper Networks Customer Service. The **no** version disables the license.

**Syntax** license nat *licenseKey*  
no license nat

- *licenseKey*—Unique string of alphanumeric characters that we provide to you

**Mode** Global Configuration

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

## license service-management

---

**Description** Specifies the Service Manager license key provided by your sales representative or Juniper Networks Customer Service. The **no** version removes the license.

**Syntax** license service-management *licenseKey*  
no license service-management

- *licenseKey*—Unique string of alphanumeric characters that Juniper Networks provides to you

**Mode** Global Configuration

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

## lifetime

---

**Description** From IKE Policy Configuration mode, associates a lifetime with IKE SAs established with this IKE policy. The **no** version restores the lifetime to its default, 28800 seconds (8 hours).

From IPsec Transport Profile Configuration mode, sets a lifetime range for the IPsec connection in volume of traffic and/or in seconds. If the client PC offers a lifetime within this range, the router accepts the offer. The **no** version returns the lifetime to the default, 100000–4294967295 KB and 900–86400 seconds (1–24 hours).

From IPsec Tunnel Profile Configuration mode, specifies the IPsec lifetime range used on IPsec security association negotiations. The **no** version returns the lifetime to its default, 28800 seconds (8 hours) and no traffic volume limit.

**Syntax** To set an IKE lifetime:

`lifetime seconds`

`no lifetime`

- *seconds*—Number of seconds an SA lives before expiring; in the range 900–86400 seconds

To set an IPsec transport profile lifetime:

`lifetime { kilobytes lowKilobytes highKilobytes | seconds lowSeconds highSeconds | seconds lowSeconds highSeconds kilobytes lowKilobytes highKilobytes }`

`no lifetime`

- *lowKilobytes*—Lower range of the lifetime in kilobytes; in the range 100000–4294967295 KB; default value is 100000
- *highKilobytes*—Higher range of the lifetime in kilobytes; in the range 100000–4294967295 KB; default value is 4294967295
- *lowSeconds*—Lower range of the lifetime in seconds; in the range 300–86400 seconds; default value is 3600
- *highSeconds*—Higher range of the lifetime in seconds; in the range 300–86400 seconds; default value is 86400

To set an IPSec tunnel profile lifetime:

```
lifetime { seconds lowSeconds highSeconds | kilobytes lowKilobytes highKilobytes |
seconds lowSeconds highSeconds kilobytes lowKilobytes highKilobytes }
```

no lifetime

- *lowSeconds*—Lower range of the lifetime in seconds; in the range 900–86400 seconds; default value is 3600
- *highSeconds*—Higher range of the lifetime in seconds; in the range 900–86400 seconds; default value is 86400
- *lowKilobytes*—Lower range of the lifetime in kilobytes; in the range 100000–4294967295 KB; default value is 100000
- *highKilobytes*—Higher range of the lifetime in kilobytes; in the range 100000–4294967295 KB; default value is 4294967295

**Mode** IKE Policy Configuration, IPSec Transport Profile Configuration, IPSec Tunnel Profile Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
IPSec Tunnel Profile Configuration mode added in JUNOS Release 7.3.0.

## line

**Description** Opens virtual terminal lines or the console line and allows you to configure the lines. By default five vty lines (0–4) are open. The **no** version removes a vty line or a range of lines from your configuration; users will not be able to run Telnet, SSH, or FTP to lines that you remove. When you remove a vty line, the router removes all lines above that line. For example, **no line vty 6** causes the router to remove lines 6 through 29. You cannot remove lines 0 through 4.



**NOTE:** Once lines are open, login is enabled by default. Before users can access the lines, you must configure a password, disable login using the **no login** command, or configure AAA authentication on the line.

**Syntax** line { console *lineNumber* | vty *lineRangeStart* [ *lineRangeEnd* ] }  
no line vty *lineNumber*

- console—Specifies the console line
- vty—Specifies vty lines
- *lineNumber*—Number of a single line; 0 for the console line
- *lineRangeStart*—Start of the vty line range; a number from 0–29
- *lineRangeEnd*—End of the vty line range; a number from 0–29

**Mode** Global Configuration

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



## link

---

**Description** Links the pool currently being configured to another DHCP local address pool. The linked pool acts as a backup pool. The **no** version removes the link.

**Syntax** link *poolName*  
no link

- *poolName*—Name of pool to which you want to link the pool currently being configured

**Mode** DHCP Local Pool Configuration

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

## link failover force

---

**Description** Forces a GE I/O module to switch from one port to another. There is no **no** version.

**Syntax** link failover force

**Mode** Interface Configuration

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

## link failover timeout

---

**Description** Specifies the time that the router waits for a port on a GE I/O module to become active before the router switches to the redundant port. The **no** version restores the default setting, in which the router sets this time automatically.

**Syntax** link failover timeout *failTime*  
no link failover timeout

- *failTime*—Time that the router waits; in the range 100–10000 ms

**Mode** Interface Configuration

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

## link selection

---

**Description** Disables redundancy on a GE I/O module by allowing operation on the specified port only. The **no** version restores the default situation, in which port redundancy is enabled.

**Syntax** link selection { primary | secondary }  
no link selection

- primary—Allows operation on only the primary port
- secondary—Allows operation on only the redundant port

**Mode** Interface Configuration

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

## list

---

**Description** Lists the currently configured MPLS explicit path (optionally starting at a particular index). There is no **no** version.

**Syntax** list [ *index* ]

- *index*—Number of a node in an ordered set of abstract nodes set with the **index** command; in the range 1–255

**Mode** Explicit Path Configuration

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

## load-interval

---

**Description** Sets the time interval at which the router calculates bit rates and packet rates for an interface. The **no** version restores the default value, 300 seconds. This command is not available for the Ethernet interface on the SRP module.

**Syntax** load-interval *timeInterval*  
no load-interval

- *timeInterval*—Multiple of 30 seconds; in the range 30–300

**Mode** Interface Configuration

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

## load-rebalance

---

**Description** Configures the QoS algorithm for rebalancing the links in an 802.3ad link aggregation group (LAG). To configure the algorithm to dynamically rebalance the LAG using existing parameters, issue the **load-rebalance** command without any keywords. The **no** version restores the default parameters.

**Syntax** [ no ] load-rebalance [ period *rebalancePeriod* start-threshold *rebalanceStartThreshold* [ percent | subscribers ] stop-threshold *rebalanceStopThreshold* [ percent | subscribers ] maximum-improvement *rebalanceMaximumImprovement* [ percent | subscribers ] ]

- *rebalancePeriod*—Time period for rebalancing in seconds; in the range 0–86400; the default is 60 seconds
- *rebalanceStartThreshold*—Amount of imbalance in the LAG that triggers the algorithm to start rebalancing; the default is 0 percent
  - percent—Specifies that the threshold is measured as a percentage of the average load per link; in the range 0–100
  - subscribers—Specifies that the threshold is measured by the number of subscribers away from the average subscriber count per link in the LAG; in the range 0–100000
- *rebalanceStopThreshold*—Amount of imbalance in the LAG that triggers the algorithm to stop rebalancing; the default is 0 percent
  - percent—Specifies that the amount of imbalance is measured as a percentage of the average load per link; in the range 0–100
  - subscribers—Specifies that the threshold is measured by the number of subscribers away from the average subscriber count link in the LAG; in the range 0–100000
- *rebalanceMaximumImprovement*—Maximum number of links in the LAG to rebalance; the default is 100 percent
  - percent—Specifies that the maximum number of links is measured as a percentage of the total links; in the range 0–100
  - subscribers—Specifies that the maximum number of links is measured by the number of subscribers; in the range 0–100000

**Mode** Interface Configuration

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

### Related Topics

- [Configuring Load Rebalancing Parameters for 802.3ad Link Aggregation Groups](#)

## local host

---

<b>Description</b>	Configures an L2TP local hostname to be used with a remote host. The <b>no</b> version removes the local hostname from use with a remote host.
<b>Syntax</b>	local host <i>hostname</i> no local host ■ <i>hostname</i> —L2TP local hostname; string of up to 64 characters (no spaces)
<b>Mode</b>	L2TP Destination Profile Host Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## local-interface

---

<b>Description</b>	Maps a domain name to a loopback interface. The <b>no</b> version deletes the mapping to the user domain name.
--------------------	--



**NOTE:** In Domain Map Configuration mode, this command is replacing the deprecated **loopback** command for mapping a domain name to a loopback interface. The **loopback** command may be removed completely from the Domain Map Configuration mode in a future release.

<b>Syntax</b>	local-interface { <i>interfaceType interfaceSpecifier</i>   <i>ipAddress</i> [ <i>ipAddressMask</i> ] } no local-interface ■ <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 loopback interface ■ <i>ipAddressMask</i> —IP address mask of the loopback interface
<b>Mode</b>	Domain Map Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## local ip address

---

**Description** From L2TP Destination Profile Host Configuration mode, configures a local IP address for use with a remote host. The **no** version removes the local IP address from use with a remote host.

From IPsec Transport Profile Configuration mode, specifies the local endpoint of the IPsec transport connection. It also enters Local IPsec Transport Profile Configuration mode. The **no** version deletes the local IP address.

From IPsec Tunnel Profile Configuration mode, specifies the given local IP address as a server address. The router continues to monitor UDP port 500 for incoming user login requests (that is, IKE source address negotiations). When using global preshared keys, consider the following points:

- Global preshared keys enable a group of users to share a single authentication key. Using a shared key for a group of users simplifies the administrative job of setting up keys. However, changing or removing a preshared key for one user (for security reasons) affects other users with the same key.
- Specific keys for individual users take precedence over global keys assigned to the same user. In other words, if a user has both an assigned specific key and a global key that user must use the specific key or authentication fails.
- Avoid specifying the same local endpoint and virtual router in the same profile. Local endpoint and virtual router values override each other. The last value set in the profile is the value used.

The **no** version causes the router to stop monitoring UDP port 500 for user requests and removes any preshared key associations with the local IP address.

**Syntax** From L2TP Destination Profile Host Configuration mode:

**local ip address** *ipAddress*

**no local ip address**

- *ipAddress*—IP address

From IPsec Transport Profile Configuration mode:

[ **no** ] **local ip address** *ipAddress*

- *ipAddress*—Local endpoint for the IPsec transport connection

From IPsec Tunnel Profile Configuration mode:

**local ip address** *ipAddress* { **pre-share** *keyString* | **pre-share-masked** *maskedKeyString* }

**no local ip address**

- *ipAddress*—Local endpoint for the IPsec transport connection
- *keyString*—Key value in ascii format
- *maskedKeyString*—Key value in ascii format

**Mode** IPsec Transport Profile Configuration, IPsec Tunnel Profile Configuration, L2TP Destination Profile Host Configuration

**Release Information** Command introduced before JUNOS Release 7.1.0.  
IPsec Tunnel Profile Configuration mode added in JUNOS Release 7.3.0.

## local ip identity

---

**Description** Overrides the local identity (phase 2 identity) used for IPSec security association negotiations. For IPSec negotiations to succeed, the local and peer identities at one end of the tunnel must match the peer and local identities at the other end (respectively). The **no** version restores the default value, wildcard network value 0.0.0.0/0.

**Syntax** local ip identity  
 { address *ipAddress* | range *ipRangeLow ipRangeHigh* | subnet *netAddress netMask* }  
 no local ip identity

- *ipAddress*—IP address used as the local identity for IPSec security association negotiations
- *ipRangeLow*—Low end of a range used as the local identity for IPSec security association negotiations
- *ipRangeHigh*—High end of a range used as the local identity for IPSec security association negotiations
- *netAddress*—IP network address used as the local identity for IPSec security association negotiations
- *netMask*—IP network mask used as the local identity for IPSec security association negotiations

**Mode** IPSec Tunnel Profile Configuration

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

## local ip network

---

**Description** Specifies networks that are reachable through the IPSec tunnel. You can configure up to 16 networks for this method of “split-tunneling.” The **no** version removes the specified network from the reachable list.

**Syntax** local ip network *ipNetwork ipMask*  
no local ip network

- *ipNetwork*—IP network reachable through the secure connection
- *ipMask*—IPv4 subnetwork mask for the IP network

**Mode** IPSec Tunnel Profile Configuration

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

## log

---

**Description** Defines a IP policy rule that configures logging settings for packets that match the current classifier control list. The **no** version removes a log rule from a policy list; the **suspend** keyword temporarily suspends the rule; the **no suspend** version resumes application of a suspended rule.



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

---

**Syntax** [ no ] [ suspend ] log

**Mode** Classifier Group Configuration

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

### Related Topics

- Policy Rule Precedence

## log-adjacency-changes

---

- Description** Generates a log message when the state of an IS-IS adjacency or an OSPFv3 neighbor changes. For OSPFv2 neighbors, use the **ospf log-adjacency-changes** command. Manipulates the same log as the Global Configuration **log** commands. The **no** version disables this function.
- Syntax** For IS-IS adjacencies:  
 log-adjacency-changes [ severity { severityValue | severityNumber } ]  
 [ verbosity verbosityLevel ]  
 no log-adjacency-changes
- For OSPFv3 adjacencies:  
 [ no ] log-adjacency-changes [ severity { severityValue | severityNumber } ]  
 [ verbosity verbosityLevel ]
- severity—Sets minimum severity of the log messages for this category; 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
  - verbosity—Specifies the verbosity of this log category’s messages
  - verbosityLevel—Specifies the verbosity of the log category’s messages; can be any of the following:
    - high—Verbose
    - low—Terse
    - medium—Moderate detail
- Mode** Router Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.



## log destination

---

**Description** Configures the logging of system messages. You can direct messages to a destination, limit the messages logged based on severity level, or limit the event categories for which messages are logged. The **no** versions restore default settings or reverse the effect of previous commands that limited event categories.



**NOTE:** You can display traffic logs—such as ipTraffic, icmpTraffic, tcpTraffic, and udpTraffic—only via the **show log data** command or from the *SRP module* console. You cannot redirect traffic logs elsewhere, such as to a system log or nonvolatile storage file, or to a Telnet session.

**Syntax** To specify the destination and severity of messages logged:

```
log destination { console | nv-file | syslog ipAddress [ facility facilityId ] }  
{ severity { severityValue | severityNumber } | off }
```

no log destination [ console | nv-file | syslog [ *ipAddress* ] ]

To specify which event categories are logged to syslog:

```
log destination syslog ipAddress { include | exclude } category [ category ]*
```

no log destination syslog *ipAddress* { include | exclude } [ *category* ]\*

- console—Configures or modifies logging to the local console
- nv-file—Configures or modifies logging to the nonvolatile log file; the nv-file can accept only events at a severity level of critical or higher in importance
- syslog—Configures or modifies logging to a system log server
- *ipAddress*—IP address of the system log application on a remote host
- *facility*—Specifies the system log facility on the host
- *facilityId*—Number in the range 0–7 that identifies the corresponding logging facility, local0–local7
- severity—Sets 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

- **off**—Disables logging to this destination
  - **include**—Sends only the specified event categories to the system log server
  - **exclude**—Sends all event categories except those specified to the system log server
- Issuing an **include** command after an **exclude** command (or vice versa) overrides the earlier command.
- You can issue successive **include** commands or successive **exclude** commands. Successive commands expand the list of included or excluded categories.
- *category*—Log category; refer to the CLI online Help for available options
  - \*—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.

## log destination syslog source

---

**Description** Specifies a source interface type and location for events logged to a system log server. Overrides the type and location of the actual source to enable server access behind firewalls. The **no** version restores the default state, which is to use the actual interface type and location of the source.

**Syntax** `log destination syslog ipAddress source interfaceType interfaceSpecifier`  
`no log destination syslog ipAddress source [ interfaceType interfaceSpecifier ]`

- *ipAddress*—IP address of the system log application
- *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.

## log engineering

---

**Description** Enables engineering logs. The **no** version disables engineering logs.

**Syntax** `[ no ] log engineering`

**Mode** Global Configuration

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

## log fields

---

<b>Description</b>	Selects optional fields to be added to all logs. The <b>no</b> version disables the optional log fields.
<b>Syntax</b>	<pre>log fields { timestamp   no-timestamp } { instance   no-instance } { calling-task   no-calling-task }  no log fields</pre> <ul style="list-style-type: none"><li>■ timestamp—Includes the timestamp in log messages</li><li>■ no-timestamp—Does not include the timestamp in log messages</li><li>■ instance—Includes the event ID in log messages</li><li>■ no-instance—Does not include the event ID in log messages</li><li>■ calling-task—Includes the logging task name in log messages</li><li>■ no-calling-task—Does not include the logging task name in log messages</li></ul>
<b>Mode</b>	Global Configuration
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## log filters

---

<b>Description</b>	This command has only a <b>no</b> version. See the <b>no log filters</b> command for a complete description and syntax.
--------------------	---

## log here

---

<b>Description</b>	Enables the current terminal as a log console. The <b>no</b> version disables logs destined for a console from being displayed on the current terminal.
<b>Syntax</b>	<pre>[ no ] log here</pre>
<b>Mode</b>	Global Configuration, Privileged Exec, User Exec
<b>Release Information</b>	Command introduced before JUNOS Release 7.1.0.

## log severity

**Description** Sets the severity level for systemwide logs (that is, when no individual event category is specified) or for a specific event category. The **no** version returns severity changes to their default settings or the systemwide setting.



**NOTE:** After you change the log severity level for an individual log event category, you cannot use systemwide commands to subsequently change the severity level for that category. To change individually altered log event categories using systemwide commands, you must first change the log event back to its default setting.

**Syntax** `log severity { severityValue | off | severityNumber }  
[ eventCategory [ instanceTree ] | eventCategory instanceTree | eventCategory ]  
no log severity [ severityValue | off | severityNumber ] [ eventCategory  
[ filters | instanceTree ] | eventCategory { filters | instanceTree } | eventCategory | * ]`

- *severityValue* and *severityNumber*—Minimum severity of the log messages displayed for the selected category; 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
- off—Disables systemwide log severity for all default level event categories when no event category is specified or disables log severity for a specified event category
- *eventCategory*—Log category; refer to the CLI online Help for available options
- *filters*—Removes all log filters for the event category
- *instanceTree*—Log-specific filter parameters; refer to the CLI online Help for available options
- \*—Resets all log severities, systemwide and individual, to default settings

**Mode** Global Configuration

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

## log unlimited

---

**Description** Removes the limit on the number of outstanding buffers for an event category. The **no** version returns the number of buffers to the default value.

**Syntax** [ no ] log unlimited [ *eventCategory* ]

- *eventCategory*—Log category; refer to the CLI online Help for available options

**Mode** Global Configuration, Privileged Exec, User Exec

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

## log verbosity

---

**Description** Sets the verbosity level for a selected category. The **no** version returns the log verbosity to the default value, low.

**Syntax** log verbosity *verbosityLevel* [ *eventCategory* ]  
no log verbosity [ *verbosityLevel* ] [ *eventCategory* ]

- *verbosityLevel*—Verbosity for the log category:
  - low—Terse (default)
  - medium—Moderate detail
  - high—Verbose
- *eventCategory*—Log category; refer to the CLI online Help for available options

**Mode** Global Configuration

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

## login

---

**Description** Requires you to log in with a password. The **no** version removes the password requirement and allows connections without a password.



**NOTE:** If you issue this command when no password has been configured, access to Telnet is refused.

**Syntax** [ no ] login

**Mode** Line Configuration

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

## login authentication

---

**Description** Applies an AAA authentication list to the vty sessions that you specified for AAA authentication. The **no** version removes all authentication methods, which means the router accepts Telnet sessions without challenge.

**Syntax** login authentication *authListName*  
no login authentication

- *authListName*—Authentication list name of up to 32 characters

**Mode** Line Configuration

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

## logout subscribers

---

**Description** Logs out the authenticated PPP or DHCP local server users. There is no **no** version.

**Syntax** logout subscribers { all | username *userName* | domain *domainName* | virtual-router *vrName* | port *interfaceSpecifier* }

- all—Logs out all PPP or DHCP local server sessions
- *userName*—Active PPP or DHCP local server session whose names match the username
- *domainName*—Active PPP or DHCP local server session whose usernames have that domain name
- *vrName*—Active PPP or DHCP local server session whose interfaces are bound to a specific virtual router
- *interfaceSpecifier*—Location of the port with active PPP subscribers; 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.

## loopback

---

**Description** Specifies the loopback mode for a module controller or interface. The **no** version clears all loopback on the module or interface (the default), or deletes the mapping to the user domain name.



**NOTE:** In Domain Map Configuration mode, this command has been replaced by the **local-interface** command and may be removed completely from Domain Map Configuration mode in a future release.

---

**Syntax** For module controllers, the options available vary depending on the module being configured.

CT3 module:

`loopback { local | network | payload }`

`no loopback`

`[ no ] loopback remote`

cOCx/STMx SONET controller (SONET/SDH section layer), OCx/STMx line modules:

`loopback { local | network }`

`no loopback`

COCX-F3 module:

`loopback { local | network | payload }`

`no loopback`

- **local**—Loops the data back toward the router; on supported line modules also sends an alarm indication signal (AIS) out toward the network.
- **network payload**—Loops the data toward the network after the framer has processed the data.
- **network line**—Loops the data toward the network before the data reaches the framer.
- **remote**—Sends a signal notifying the device at the remote end to activate or deactivate the line loopback.
- **network**—Loops the data toward the network before the data reaches the framer.
- **payload**—Loops the data toward the network after the framer has processed the data.

For interfaces; the options available vary depending on the interface being configured.

ATM interface (cannot be used on a subinterface):

**loopback { diagnostic | line }**

**no loopback**

POS interface:

**[ no ] loopback { internal | line }**

- **diagnostic**—Places the interface into internal loopback
- **line**—ATM interface: places the interface into external loopback; POS interface: connects the received network signal directly to the transmit network signal. When configured in line loopback mode, the router never receives data from the network.
- **internal**—Connects the local transmitted signal to the local received signal

**Mode** Controller Configuration, Interface Configuration

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

## **lsp-gen-interval**

---

**Description** Sets the minimum interval at which originated IS-IS link-state packets are generated on a per LSP basis. The **no** version restores the default value, 5 seconds.

**Syntax** **lsp-gen-interval [ level-1 | level-2 ] seconds**

**no lsp-gen-interval [ level-1 | level-2 ]**

- **level-1**—Sets interval for level 1 only
- **level-2**—Sets interval for level 2 only
- **seconds**—Number in the range 0–120; the minimum interval in seconds; default value is 5 seconds

**Mode** Router Configuration

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



## **lsp-mtu**

---

- Description** Sets the maximum size of an IS-IS link-state packet generated by the software. The **no** version restores the default value, 1497 bytes.
- Syntax** *lsp-mtu bytes*  
*no lsp-mtu*
- *bytes*—Number in the range 128–9180; the MTU size in bytes; default value is 1497
- Mode** Router Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.

## **lsp-refresh-interval**

---

- Description** Sets the link-state packet rate at which locally generated IS-IS link-state packets are periodically transmitted. The **no** version restores the default value, 900.
- Syntax** *lsp-refresh-interval seconds*  
*no lsp-refresh-interval*
- *seconds*—Number in the range 1–65535; the refresh interval in seconds; default value is 900
- Mode** Router Configuration
- Release Information** Command introduced before JUNOS Release 7.1.0.