

D Commands

data-character-bits

Description Sets the number of data bits available for characters for all sessions on the specified vty lines. There is no **no** version.

Syntax data-character bits { 7 | 8 }

- 7—Specifies 7 data bits per character; this setting supports only characters in the standard ASCII set
- 8—Specifies 8 data bits per character; default setting, supports the full set of 8-bit international characters

Mode Line Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

dead-interval

Description Sets the time period that the OSPF router waits without seeing hello packets from a remote neighbor before declaring the neighbor to be down. The **no** version restores the default value.

Syntax dead-interval *deadInterval*
no dead-interval

- *deadInterval*—Number in the range 1–65535 seconds; default value is 40 seconds

Mode Remote Neighbor Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

deadtime

Description Configures the amount of time (in minutes) that a server is marked as unavailable if a request times out for the configured retry count. If a server fails to answer a request, it is marked “unavailable” by the router. The router does not send requests to the server for the configured time. The **no** version restores the default value, 0, turning off the deadtime mechanism.

Syntax deadtime *recovery*
no deadtime

- *recovery*—Amount of time that a server is marked as unavailable in the range 0–30 (minutes); default value is 0

Mode RADIUS Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

debounce-time

Description	Sets the interval to wait before bringing up a RIP interface that was brought down. The no version restores the default value, 10.
Syntax	debounce-time <i>interval</i> no debounce-time <ul style="list-style-type: none"> ■ <i>interval</i>—Seconds in the range 0–60
Mode	Address Family Configuration, Router Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

debug ip bgp

Description	Shows information about the selected variable. The no version disables the display.
Syntax	<pre>debug ip bgp [in out] [peerAddress [peerAddressMask]] [bgpLog] [router routerName] [filtering-router filteringRouterName] [accessClassName] [route-map mapName] [severity { severityValue severityNumber }] [verbosity verbosityLevel] [secondary]</pre> <pre>no debug ip bgp [in out] [peerAddress [peerAddressMask]] [bgpLog] [router routerName] [filtering-router filteringRouterName] [accessClassName] [route-map mapName]</pre> <ul style="list-style-type: none"> ■ <i>in</i>—Displays information for inbound events ■ <i>out</i>—Displays information for outbound events ■ <i>peerAddress</i>—IP address of BGP peer for which information is displayed ■ <i>peerAddressMask</i>—Network mask of BGP peer for which information is displayed ■ <i>bgpLog</i>—BGP log of interest; one of the following options: <ul style="list-style-type: none"> ■ <i>dampening</i>—BGP dampening event; route is suppressed or no longer suppressed by route-flap dampening ■ <i>events</i>—BGP finite state machine events and transitions ■ <i>keepalives</i>—BGP keepalive message events ■ <i>next-hops</i>—BGP next hop events ■ <i>updates</i>—BGP routing table update events

- *routerName*—Name of the virtual router that owns the BGP router for which information is being displayed
- *filteringRouterName*—Name of the virtual router that owns the access class and route map parameters
- *accessClassName*—Name of an access list to filter output
- *mapName*—Name of a route map to filter output
- *severity*—Specifies the 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
- *verbosityLevel*—Verbosity of the log category’s messages; can be any of the following:
 - *low*—Terse
 - *medium*—Moderate detail
 - *high*—Verbose
- *secondary*—Indicates that the specified filter conditions for the log are imposed in addition to any that were previously specified; if omitted, the specified filter conditions replace any that were previously specified

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ip mbgp

Description Shows information about the selected variable. The **no** version disables the display.

Syntax

```
debug ip mbgp [ in | out ] [ peerAddress [ peerAddressMask ] ] [ bgpLog ]
[ router routerName ] [ filtering-router filteringRouterName ] [ accessClassName ]
[ route-map mapName ] [ severity { severityValue | severityNumber } ]
[ verbosity verbosityLevel ] [ secondary ]

no debug ip mbgp [ in | out ] [ peerAddress [ peerAddressMask ] ] [ bgpLog ]
[ router routerName ] [ filtering-router filteringRouterName ] [ accessClassName ]
[ route-map mapName ]
```

- *in*—Displays information for inbound events
- *out*—Displays information for outbound events
- *peerAddress*—IP address of BGP peer for which information is displayed
- *peerAddressMask*—Network mask of BGP peer for which information is displayed
- *bgpLog*—BGP log of interest; one of the following options:
 - *dampening*—BGP dampening event; route is suppressed or no longer suppressed by route-flap dampening
 - *events*—BGP finite state machine events and transitions
 - *keepalives*—BGP keepalive message events
 - *next-hops*—BGP next hop events
 - *updates*—BGP routing table update events
- *routerName*—Name of the virtual router that owns the BGP router for which information is being displayed
- *filteringRouterName*—Name of the virtual router that owns the access class and route map parameters
- *accessClassName*—Name of an access list to filter output
- *mapName* —Name of a route map to filter output
- *severity*—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.
- *secondary*—Indicates that the specified filter conditions for the log are imposed in addition to any that were previously specified; if omitted, the specified filter conditions replace any that were previously specified

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ip ospf

Description Shows information about the selected variable. The **no** version disables the display.

Syntax debug ip ospf *ospfLog* [*severity* { *severityValue* | *severityNumber* }]
[*verbosity* *verbosityLevel*]

no debug ip ospf *ospfLog*

- *ospfLog*—OSPF log of interest; one of the following options:
 - adj—OSPF adjacency events
 - elect-dr—OSPF designated router election
 - events—OSPF general events
 - lsa—OSPF link-state advertisements events
 - neighbor—OSPF neighbor state machine
 - packets-rcvd—OSPF packets received
 - packets-sent—OSPF packets sent
 - route—OSPF route events
 - spf—All OSPF shortest path first calculation events
 - spf-ext—OSPF shortest path first external route calculation events
 - spf-inter—OSPF shortest path first interarea route calculation events
 - spf-intra—OSPF shortest path first intra-area route calculation events
- *severity*—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ip pim

Description Shows information about the selected variable. The **no** version disables the display.

Syntax The syntax differs for PIM Dense Mode and PIM Sparse Mode.

PIM Dense Mode:

```
debug ip pim { pimLog [ severity { severityValue | severityNumber } ]
[ verbosity verbosityLevel ] | switchState groupAddress sourceAddress |
dense-mode { on | off } }
```

PIM Sparse Mode:

```
debug ip pim { pimLog [ severity { severityValue | severityNumber } ]
[ verbosity verbosityLevel ] | switchState groupAddress sourceAddress |
sparse-mode { on | off | sg-state [ group groupAddress
[ source sourceAddress ] | rp rpAddress ] [ count ] } }
```

no debug ip pim *pimLog*

- *pimLog*—PIM log of interest; one of the following options:
 - *autoRp-rcvd*—Auto-RP packets received
 - *autoRP-sent*—Auto-RP packets sent
 - *engineering*—PIM engineering
 - *hellos-rcvd*—PIM hello messages received
 - *hellos-sent*—PIM hello messages sent
 - *packets*—PIM packets received and sent
 - *packets-rcvd*—PIM packets received
 - *packets-sent*—PIM packets sent
- *severity*—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.
- *switchState*—Switches from one type of tree to another
 - *rpt-switch*—Switch from a shortest-path tree to a shared path tree
 - *spt-switch*—Switch from a shared-path tree to a shortest path tree
- *groupAddress*—IP address of the multicast group
- *sourceAddress*—IP address of the multicast source
- *on*—Turns on the specified PIM mode on all virtual routers

- off—Turns off the specified PIM mode on all virtual routers
- sg-state—Displays information about the relationship between a source, multicast group, and RP router
- rp—Displays information about the relationships between sources, groups, and the specified RP router
- *rpAddress*—Address of the RP router
- count—Displays one of the following
 - (with no optional keywords) number of relationships between a source, multicast group, and RP router
 - (with the **group** keyword) number of sources associated with the multicast group for PIM sparse mode
 - (with the **source** and **group** keywords) number of source-group pairs for PIM sparse mode
 - (with the **rp** keyword) number of source-group pairs associated with the RP router for PIM sparse mode

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ip rip

Description Shows information about the selected variable. The **no** version disables the display.

Syntax debug ip rip *ripLog* [severity { *severityValue* | *severityNumber* }]
[*verbosity* *verbosityLevel*]
no debug ip rip *ripLog*

- *ripLog*—RIP log of interest; one of the following options:
 - events—General RIP events, such as removing RIP from an interface or creating the RIP process
 - route—Events associated with two RIP routers exchanging routes
- severity—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ipv6 ospf

Description Shows information about the selected variable. The **no** version disables the display.

Syntax `debug ipv6 ospf ospfLog [severity { severityValue | severityNumber }]`
`[verbosity verbosityLevel]`

`no debug ipv6 ospf ospfLog`

- *ospfLog*—OSPF log of interest; one of the following options:
 - *adj*—OSPF adjacency events
 - *elect-dr*—OSPF designated router election
 - *events*—OSPF general events
 - *lsa*—OSPF link-state advertisements events
 - *neighbor*—OSPF neighbor state machine
 - *packets-rcvd*—OSPF packets received
 - *packets-sent*—OSPF packets sent
 - *route*—OSPF route events
 - *spf*—All OSPF shortest path first calculation events
 - *spf-ext*—OSPF shortest path first external route calculation events
 - *spf-inter*—OSPF shortest path first interarea route calculation events
 - *spf-intra*—OSPF shortest path first intra-area route calculation events
- *severity*—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug ipv6 pim

Description Shows information about the selected variable. The **no** version disables the display.

Syntax debug ipv6 pim
{ *pimLog* [*severity* { *severityValue* | *severityNumber* }] [*verbosity* *verbosityLevel*] |
switchState *groupAddress* *sourceAddress* |
dense-mode { on | off } |
sparse-mode { on | off | sg-state [*group* *groupAddress*
[*source* *sourceAddress*] | rp *rpAddress*] [*count*] } }
no debug ipv6 pim *pimLog*

- *pimLog*—PIM log of interest; one of the following options:
 - autoRp-rcvd—Auto-RP packets received
 - autoRP-sent—Auto-RP packets sent
 - engineering—PIM engineering
 - hellos-rcvd—PIM hello messages received
 - hellos-sent—PIM hello messages sent
 - packets—PIM packets received and sent
 - packets-rcvd—PIM packets received
 - packets-sent—PIM packets sent
- *severity*—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- *verbosityLevel*—Verbosity of the log category's messages. See the **debug ip bgp** command.
- *switchState*—Switches from one type of tree to another
 - rpt-switch—Switch from a shortest-path tree to a shared path tree
 - spt-switch—Switch from a shared-path tree to a shortest path tree
- *groupAddress*—IPv6 address of the multicast group
- *sourceAddress*—IPv6 address of the multicast source
- on—Turns on the specified PIM mode on all virtual routers
- off—Turns off the specified PIM mode on all virtual routers
- sg-state—Displays information about the relationship between a source, multicast group, and RP router

- **rp**—Displays information about the relationships between sources, groups, and the specified RP router
- **rpAddress**—Address of the RP router
- **count**—Displays one of the following
 - (with no optional keywords) number of relationships between a source, multicast group, and RP router
 - (with the **group** keyword) number of sources associated with the multicast group for PIM sparse mode
 - (with the **source** and **group** keywords) number of source-group pairs for PIM sparse mode
 - (with the **rp** keyword) number of source-group pairs associated with the RP router for PIM sparse mode

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

debug isis

Description Displays debug-related information about selected IS-IS log parameters. This command manipulates the same log as the Global Configuration **log** commands. The **no** version disables debugging display.

Syntax `debug isis isisLog [severity { severityValue | severityNumber }]`
`[verbosity verbosityLevel]`

`no debug isis isisLog`

- **isisLog**—IS-IS log of interest; one of the following options:
 - **adj-packets**—IS-IS adjacency-related packets, such as hello packets sent and IS-IS received adjacencies going up and down
 - **mpls traffic-eng advertisements**—MPLS traffic-engineering agent advertisements
 - **mpls traffic-eng agents**—MPLS traffic-engineering agents
 - **snp-packets**—IS-IS CSNPs/PSNPs
 - **spf-events**—Shortest path first events
 - **spf-statistics**—SPF timing and statistic data
 - **spf-triggers**—SPF triggering events
 - **update-packets**—Update-related packets
- **severity**—Specifies the minimum severity of the log messages displayed for the selected category. See the **debug ip bgp** command.
- **verbosityLevel**—Verbosity of the log category's messages. See the **debug ip bgp** command.

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

default-fields peer

Description Specifies the fields that will appear by default in the output of subsequently issued **show ip bgp summary** and **show bgp ipv6 summary** commands. The **no** version removes the fields from the output.

Syntax [no] default-fields peer *fieldOptions*

- *fieldOptions*—Field(s) to be displayed, in the format
all | [dynamic | intro | last-reset-reason | messages-received | messages-sent |
more-in-queue | peer-type | prefixes-received | remote-as | rib-version |
send-queue-length | state | times-up | up-down-time | updates-received |
updates-sent]*
- all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- dynamic—Nature of peer, dynamic or not
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- last-reset-reason —Reason for most recent reset
- messages-received—Total number of messages received from the peer
- messages-sent—Total number of messages sent to the peer
- more-in-queue—Status indicating whether any messages are waiting to be sent to this peer
- peer-type—Type of BGP peer: internal, external, or confederation
- prefixes-received—Number of unique prefixes received from the peer
- remote-as—Remote AS number of the peer
- rib-version—Last RIB version queued to be sent to this peer
- send-queue-length—Number of messages queued to be sent to this peer
- state—State of the BGP session
- times-up—Number of times the session has been established
- up-down-time—How long the session has been up or down
- updates-received—Number of update messages received from the peer
- updates-sent—Number of update messages sent to the peer
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

default-fields route

Description Specifies the fields that will appear by default in the output of any subsequently issued **show ip bgp** or **show bgp ipv6** command that displays routes (except for the **show ip bgp summary** or **show bgp ipv6 summary** commands). The **no** version removes the fields from the output.

Syntax [no] default-fields route *fieldOptions*

- *fieldOptions*—Field(s) to be displayed, in the format
all | [afi | aggregator | as-path | atomic-aggregate | best | clusters |
communities | extended-communities | imported | intro | in-label | loc-pref |
med | next-hop | next-hop-cost | origin | originator-id | out-label | peer |
peer-type | rd | safi | stale | unknown-types | weight]*
- all—All available information; not recommended, because this information for each network does not fit on a single line and is difficult to read
- afi—Address family identifier
- aggregator—AS number and IP address of aggregator
- as-path—AS path through which this route has been advertised
- atomic-aggregate—Whether the atomic aggregate attribute is present
- best—Whether this is the best route for the prefix
- clusters—List of cluster IDs through which the route has been advertised
- communities—Community number associated with the route
- extended-communities—Extended community
- imported—Whether the route was imported
- intro—Introductory information about the state of various BGP attributes; this information is displayed only if you specify this keyword
- in-label—MPLS label for the route; the label received with incoming MPLS frames
- loc-pref—Local preference for the route
- med—Multiexit discriminator for the route
- next-hop—IP address of the next router that is used when forwarding a packet to the destination network
- next-hop-cost—Whether the indirect next hop of the route is unreachable, if not, displays IGP cost to the indirect next hop
- out-label—MPLS label for the route; the label with outgoing MPLS frames
- peer—IP address of BGP peer from which route was learned
- peer-type—Type of BGP peer: internal, external, or confederation
- origin—Origin of the route
- originator-id—Router ID of the router in the local AS that originated the route

- rd—Route distinguisher
- safi—Subsequent address family identifier
- stale—Route that has gone stale due to peer restart
- unknown-types—Attribute codes for unknown path attributes
- weight—Weight of the route
- *—Indicates that one or more parameters can be repeated multiple times in a list in the command line

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

default-information originate

Description Enables BGP to advertise a default route (0.0.0.0/0) if the default route exists in the IP routing table. If the default route does not exist, you must configure it using the **ip route** command.

When you issue this command in the route-target address family, BGP advertises the Default-RT-MEM-NLRI route (0:0:0/0)

For IS-IS, OSPF, and RIP, configures a default route for the distribution of default information into the respective routing domain. IS-IS creates the default route (0.0.0.0/0) if it does not exist in the IP routing table. OSPF and RIP do not create the default route unless you use the **always** option.

For all protocols, the **no** version disables advertisement of the default route. The syntax varies with the protocol.

Syntax For BGP:
 default-information originate [route-map *mapTag*]
 no default-information originate [route-map [*mapTag*]]
 For IS-IS:
 [no] default-information originate [route-map *mapTag*]
 For RIP:
 [no] default-information originate [route-map *mapTag*]
 default-information originate always
 For OSPF:
 [no] default-information originate [always | metric *metricValue* | metric-type 1 | metric-type 2 | route-map *mapTag*]*

- *mapTag*—Name of route map used to import the default route; string of up to 32 characters
- *always*—Creates the default route, so that it is always advertised
- *metricValue*—Sets the metric for the default route; in the range 0–4294967295
- *metric-type 1*—Sets the default route’s metric type to OSPF external type 1
- *metric-type 2*—Sets the default route’s metric type to OSPF external type 2
- ***—Indicates that one or more parameters can be repeated multiple times in a list in the command line

Mode Address Family Configuration, Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

default-metric

Description Configures RIP to use this metric on redistributed routes on all subsequently created interfaces. The **no** version restores the default value, 0.

Syntax [no] default-metric *metricValue* [*interfaceType interfaceSpecifier*]

- *metricValue*—Metric to apply to routes; in the range 1–16
- *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 Address Family Configuration, Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

default-router

Description Specifies the IP address of the router that the subscriber’s computer will use for traffic destined for locations beyond the local subnet. The default router must be on the same subnet as the local server pool addresses configured with the **network** command. The **no** version removes the association between the address pool and the router.

Syntax default-router *ipAddressPrimary* [*ipAddressSecondary*]
no default-router

- *ipAddressPrimary*—IP address of preferred router
- *ipAddressSecondary*—IP address of secondary router

Mode DHCP Local Pool Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

default-upper-type mlppp

Description	Specifies that L2TP creates an MLPPP interface for the current LNS session when full LCP proxy data is not available. The no version deletes the MLPPP specification.
Syntax	default-upper-type mlppp no default-upper-type
Mode	L2TP Destination Profile Host Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

delete

Description	Deletes a directory or file in nonvolatile storage. There is no no version.
--------------------	--



NOTE: See *Deleting Files* in *JUNOS System Basics Configuration Guide, Chapter 5, Managing the System*, for detailed information on file type usage with the **delete** command.

Syntax	delete { <i>filename</i> directory <i>directoryName</i> [<i>force</i>] } <ul style="list-style-type: none">■ <i>filename</i>—Name of the local file you are deleting (for example, system1.cnf)■ <i>directoryName</i>—Path of a directory■ <i>force</i>—Forces deletion of directory even when it is not empty; however, if a file in that directory is marked by the file system as in use because it is required for the current operation or configuration, the force keyword cannot force a deletion of the directory
Mode	Boot, Privileged Exec, User Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

delta-sampling

Description	Specifies delta sampling for the trigger you are configuring. The no version returns the trigger to the default sampling method—absolute-value sampling.
Syntax	delta-sampling [discontinuity-id <i>mibId</i> discontinuity-id-type { <i>timeStamp</i> <i>timeTicks</i> }] no delta-sampling [discontinuity-id] <ul style="list-style-type: none">■ <i>discontinuity-id</i>—Specifies a discontinuity MIB ID for the sample. The discontinuity MIB ID monitors the sample for any discontinuity errors during the sample frequency. If a discontinuity error occurs, the router removes the sampling for that interval.■ <i>mibId</i>—Object ID of the discontinuity MIB attribute that you want to use for this trigger■ <i>discontinuity-id-type</i>—Specifies a discontinuity ID type (either <i>timeStamp</i> or <i>timeTicks</i>). The discontinuity ID type indicates the time value that you expect for a specific sample.
Mode	SNMP Trigger Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

deny

Description Specifies the domain name(s) that are to be denied access to AAA authentication. The **no** version negates the command.

Syntax [no] deny *domainName*

- *domainName*—Name of the domain; maximum of 64 characters

Mode AAA Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

description

Description In Controller Configuration mode, assigns a text description or an alias to a CT3, E3, T3, or SONET/SDH interface. Use the **show controllers e3**, **show controllers sonet**, **show controllers t1**, or **show controllers t3** command to display the description. The **no** version removes the description or alias.

In VRF Configuration mode, assigns a text description or an alias to the VRF. The **no** version removes the description or alias.



NOTE: In Interface Configuration mode, this command has been replaced by the **ip description** command for assigning a description to a static IP interface. This command may be removed completely from Interface Configuration mode in a future release.

Syntax description *name*
no description

- *name*—Text string or alias of up to 256 characters (in Interface Configuration mode) or up to 80 characters (in Controller Configuration mode and VRF Configuration mode)

Mode Controller Configuration, Interface Configuration, VRF Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

dhcp delete-binding

Description Deletes the specified DHCP client bindings. There is no **no** version.



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

Syntax dhcp delete-binding { all | all-local | all-external | all-relay-proxy | *bindingId* }

- all—Specifies all DHCP local server, DHCP external server, and DHCP relay proxy client bindings
- all-local—Specifies all client bindings for DHCP local server
- all-external—Specifies all client bindings for DHCP external server
- all-relay-proxy—Specifies all client bindings for DHCP relay proxy
- *bindingId*—DHCP binding ID for a specific client.

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 8.1.0.

dhcp-external delete-binding

Description Deletes a specific client binding or all bindings from the virtual router's DHCP binding table. There is no **no** version.



NOTE: This command is deprecated and might be removed completely in a future release. The function provided by this command has been replaced by the **dhcp delete-binding** command.

Syntax `dhcp-external delete-binding [binding-id bindingId | all]`

- *bindingId*—DHCP binding ID associated with the user.
- *all*—Specifies all bindings

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

diag

Description Reboots the SRP module or line module in the specified slot on all E-series routers and performs diagnostic tests. There is no **no** version.

Syntax `diag slotNumber [subsystem] [force]`

- *slotNumber*—Number of the chassis slot that contains the SRP module or line module
- *subsystem*—Type of subsystem on the E120 router or the E320 router; use when the specified *slotNumber* is a slot that contains an SRP module
 - *srp*—Indicates the system controller (SC) on one or both SRP modules; specify this keyword to restart only the portion of the SC on the individual SRP module
 - *fabric*—Indicates the portion of the switch fabric on the SRP modules; specify this keyword to restart only an individual fabric slice
- *force*—Specifies that the system manually confirm conflicting conditions when the slot of the active SRP module is specified

Mode Privileged Exec

Release Information Command introduced in JUNOS Release 7.3.0.

dir

Description Displays information about the files in nonvolatile storage, including name, size, date created, and whether they are in use. There is no **no** version.



NOTE: When high availability is enabled on the router, it is possible that files or file attributes may appear to be unsynchronized when they are not. When enabled, high availability mirrors configuration changes instantly from the active SRP module to the standby SRP module. However, although these changes are reflected immediately in memory, NVS on the standby SRP module is updated at 5-minute intervals.

Syntax dir [*path*] [short]

- *path*—Path to a specific directory
- short—Limits display to file name and creation date

Mode Privileged Exec, User Exec

Release Information Command introduced before JUNOS Release 7.1.0.

disable

Description When used from Privileged Exec mode, exits Privileged Exec mode and returns to User Exec mode.

When used from Router Configuration or Interface Configuration mode in the context of a DVMRP configuration, disables DVMRP on the virtual router or interface. The **no** version reenables DVMRP on the virtual router or interface.

When used from Router Configuration mode in the context of a RIP configuration, disables RIP on the virtual router. The **no** version enables RIP processing on the virtual router.

Syntax To return to User Exec mode:
disable [*level*]

- *level*—One of the following privilege levels; default value is 1
 - 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
 - 15—Allows the user to execute support commands

For DVMRP, RIP:
[no] disable

Mode Address Family Configuration (RIP), Interface Configuration (DVMRP only), Privileged Exec, Router Configuration (DVMRP or RIP)

Release Information Command introduced before JUNOS Release 7.1.0.

disable-autosync

Description Halts automatic synchronization between the primary and standby SRP modules. When high availability is enabled (that is, the high availability state is initializing, active, or pending) this command affects only changes to nonconfiguration files. With high availability enabled, configuration changes are always mirrored to the standby SRP module. The **no** version restores the default situation, in which automatic synchronization runs as a background process every 5 minutes.

Syntax [no] disable-autosync

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disable-dynamic-redistribute

Description Halts the dynamic redistribution of routes that are initiated by changes to a route map. Supported by DVMRP, BGP, IS-IS, OSPF, and RIP. The **no** version reenables dynamic redistribution of routes.

Syntax [no] disable-dynamic-redistribute

Mode Address Family Configuration, Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disable-incremental-external-spf

Description Disables incremental external SPF on the router; results in a full SPF when an event occurs to trigger an external SPF. The **no** version reenables incremental external SPF.

Syntax [no] disable-incremental-external-spf

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disable proxy lcp

Description Disables the proxy LCP parameter for the remote host. The **no** version enables the proxy LCP parameter for the remote host.

Syntax [no] disable proxy lcp

Mode L2TP Destination Profile Host Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disable-switch-on-error

Description Prevents the redundant SRP module from taking over if the primary SRP module experiences a software failure or if you push the reset button on the primary SRP module. Issue the **sync** command immediately before you issue this command. The **no** version restores the default situation, in which the redundant SRP module takes over if the primary SRP module experiences a failure.

Syntax [no] disable-switch-on-error

Mode Global Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disconnect-cause

Description Enables an E-series LNS to generate, for the L2TP session to which the L2TP host profile applies, 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] disconnect-cause

Mode L2TP Destination Profile Host Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

disconnect ssh

Description Terminates an active SSH session. Use the **show ip ssh** command to determine the session identifier for the session to terminate. There is no **no** version.

Syntax disconnect ssh { vty *vtyle* | *sessionId* }

- *vtyle*—Virtual terminal identifier for VTY where the SSH session resides; use the **show users** command to determine the identifier
- *sessionId*—Integer in the range 0–4294967295 that identifies the session to be terminated

Mode Privileged Exec

Release Information Command introduced before JUNOS Release 7.1.0.

discovery-mode

Description Enables ANCP discovery mode. This mode allows RADIUS software to obtain loop parameter information from a connected access node. If discovery mode is disabled, it does not accept topology discovery messages and stops advertising topology discovery capability. It does not affect any other neighbors. The **no** version disables ANCP discovery mode.

Syntax [no] discovery-mode

Mode L2C Neighbor Configuration

Release Information Command introduced in JUNOS Release 7.2.0.

distance

Description	Defines an administrative distance for RIP or OSPF routes. A distance of 255 prevents the route from being installed in the routing table. The no version either negates a command or restores the command's defaults.
Syntax	<p>The options available vary depending on your routing protocol context; that is, on whether you are configuring OSPF or RIP.</p> <p>For OSPF:</p> <pre>[no] distance { weight ospf { external distExt inter-area disInter intra-area disIntra } [external distExt inter-area distInter intra-area distIntra]* }</pre> <ul style="list-style-type: none">■ <i>distance</i>—Weight applied to OSPF routes■ <i>weight</i>—Value assigned to OSPF routes that are added to the IP routing table; a number in the range 1–255■ <i>ospf</i>—OSPF routes■ <i>distExt</i>—Distance for external type 5 and type 7 routes; a number in the range 1–255■ <i>disInter</i>—Distance for interarea routes; a number in the range 1–255■ <i>disIntra</i>—Distance for intra-area routes; a number in the range 1–255■ <i>*</i>—Indicates that one or more parameters can be repeated multiple times in a list in the command line <p>For RIP:</p> <pre>[no] distance weight</pre> <ul style="list-style-type: none">■ <i>weight</i>—Administrative distance assigned to RIP routes added to the IP routing table in the range 0–255; default value is 120
Mode	Address Family Configuration (RIP), Router Configuration (OSPF or RIP)
Release Information	Command introduced before JUNOS Release 7.1.0.

distance bgp

Description	Sets the administrative distances for BGP routes. A distance of 255 prevents the route from being installed in the routing table. The no version restores the default values.
Syntax	<pre>distance bgp externalDistance internalDistance localDistance</pre> <pre>no distance bgp [externalDistance [internalDistance [localDistance]]]</pre> <ul style="list-style-type: none">■ <i>externalDistance</i>—Administrative distance for routes external to the AS in the range 1–255; default value is 20■ <i>internalDistance</i>—Administrative distance for routes internal to the AS in the range 1–255; default value is 200■ <i>localDistance</i>—Administrative distance for local (redistributed) routes in the range 1–255; default value is 200
Mode	Address Family Configuration, Router Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

distance ip

Description Sets the administrative distance for IS-IS routes that are inserted into the IP routing table. A distance of 255 prevents the route from being installed in the routing table. The **no** version restores the default value, 115.

Syntax [no] distance *weight* ip

- *weight*—Administrative distance assigned to IS-IS routes added to the IP routing table in the range 1–255

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

distribute-domain-wide

Description Increases the granularity of routing information within an IS-IS domain by allowing routes to be distributed from level 2 to level 1. This results in more accurate routing between level 1 areas. The **no** version disables command.

Syntax [no] distribute-domain-wide

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

distribute-list

Description Specifies the distribute list, an access list applied to incoming or outgoing RIP route updates. In Remote Neighbor Configuration mode, applies only to a RIP remote-neighbor interface. The **no** version removes the distribute list. An IP access list acts as a filter; refer to the **access-list** command for details.

Syntax In Router Configuration mode:
[no] distribute-list *accessListName* { in | out } [*interfaceType interfaceSpecifier*]

In Remote Neighbor Configuration mode:
[no] distribute-list *accessListName* { in | out }

- *accessListName*—Name of the access list; string of up to 32 alphanumeric characters
- in—Applies the access list to incoming route updates
- out—Applies the access list to outgoing route updates
- *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 Address Family Configuration, Remote Neighbor Configuration, Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

dns-server

Description Assigns a DNS server to an address pool. The **no** version removes the association between the address pool and the DNS server.

Syntax dns-server *ipAddressPrimary* [*ipAddressSecondary*]
no dns-server

- *ipAddressPrimary*—IP address of preferred DNS server
- *ipAddressSecondary*—IP address of secondary DNS server

Mode DHCP Local Pool Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

do

Description Allows you to issue an Exec mode command from any configuration command mode. This command functions the same as the **run** command. There is no **no** version.

Syntax do *execCommand*

- *execCommand*—CLI command that you can issue from User Exec or Privileged Exec mode

Mode All configuration command modes

Release Information Command introduced before JUNOS Release 7.1.0.

domain

Description Specifies the domain to an automatically generated username in an IP service profile. The **no** version removes the domain.

Syntax domain *domainName*
no domain

- *domainName* —Name of the domain; maximum of 32 characters

Mode IP Service Profile Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-authentication

Description Enables or disables simple text authentication or HMAC MD5 authentication of IS-IS level 2 CSNP packets or PSNP packets. The **no** version restores the default behavior, in which authentication of IS-IS level 2 CSNPs and PSNPs is disabled.

Syntax [no] domain-authentication { csnp | psnp }

- csnp—Enables authentication of IS-IS level 2 complete sequence number PDUs (CSNPs)
- psnp—Enables authentication of IS-IS level 2 partial sequence number PDUs (PSNPs)

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-authentication-key

Description Assigns a password for authentication of IS-IS level 2 LSPs, CSNPs, and PSNPs. The **no** version deletes the password.



NOTE: Issuing this command enables simple authentication of level 2 LSPs only. To enable authentication of level 2 CSNPs or PSNPs, use the **domain-authentication** command.

Syntax domain-authentication-key [0 | 8] *authKey*
no domain-authentication-key

- 0—indicates the *authKey* is entered in unencrypted form (plaintext); this is the default option
- 8—indicates the *authKey* is entered in encrypted form (ciphertext)
- *authKey*—password; string of up to 8 characters

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-id

Description Sets the OSPF domain ID for an OSPF VRF on a PE. The **no** version restores the default value.

Syntax domain-id *domainIdAddress* | *domainId*
no domain-id

- *domainIdAddress*—OSPF domain ID in IP address format; default value is the IP address of the OSPF router configured in the VRF
- *domainId*—OSPF domain ID as an integer value in the range 0–4294967295; default value is 0

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-message-digest-key

Description Specifies an HMAC MD5 key that the router uses to create a secure, encrypted message digest of each IS-IS level 2 packet (LSPs, CSNPs, and PSNPs). The digest is inserted into the packet from which it is created. Using this algorithm for domain routers protects against unauthorized routers injecting false routing information into your network. You can specify when the router will start (default is the current time) and stop (default is never) accepting packets that include a digest made with this key. You can specify when the router will start (default is the current time plus 2 minutes) and stop (default is never) generating packets that include a digest made with this key. The **no** version deletes the key specified by the *keyId*.



NOTE: Issuing this command enables MD5 authentication of level 2 LSPs only. To enable authentication of level 2 CSNPs or PSNPs, use the **domain-authentication** command.

Syntax `domain-message-digest-key keyId hmac-md5 [0 | 8] key`
`[start-accept startAcceptTime [{ startAcceptMonth startAcceptDay | startAcceptDay`
`startAcceptMonth } startAcceptYear]]`
`[start-generate startGenTime [{ startGenMonth startGenDay | startGenDay startGenMonth }`
`startGenYear]]`
`[stop-accept { never | stopAcceptTime [{ stopAcceptMonth stopAcceptDay | stopAcceptDay`
`stopAcceptMonth } stopAcceptYear] }]`
`[stop-generate { never | stopGenTime [{ stopGenMonth stopGenDay | stopGenDay`
`stopGenMonth } stopGenYear] }]`
`no domain-message-digest-key keyId`

- *keyId*—Integer from 1 to 255 that is a unique identifier for the secret key, sent with the message digest in the packet.
- 0—Indicates the *key* is entered in unencrypted form (plaintext); this is the default option
- 8—Indicates the *key* is entered in encrypted form (ciphertext)
- *key*—String of up to 20 alphanumeric characters; secret key used by the HMAC MD5 algorithm to generate the message digest.
- *startAcceptTime*, *startAcceptMonth*, *startAcceptDay*, *startAcceptYear*—time, month, day, year that the router will start accepting packets created with this password. Use military time format *HH:MM[:SS]*.
- *startGenTime*, *startGenMonth*, *startGenDay*, *startGenYear*—Time, month, day, year that the router will start inserting this password into packets. Use military time format *HH:MM[:SS]*.
- *never*—Specifies that the router never stops accepting or generating packets; overrides previously specified stop times.

- *stopAcceptTime, stopAcceptMonth, stopAcceptDay, stopAcceptYear*—Time, month, day, year that the router will stop accepting packets created with this password. Use military time format *HH:MM[:SS]*.
- *stopGenTime, stopGenMonth, stopGenDay, stopGenYear*—Time, month, day, year that the router will stop inserting this password into packets. Use military time format *HH:MM[:SS]*.

Mode Router Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-name

Description From DHCP Local Pool Configuration mode, specifies a domain name that can be returned to the subscriber of an address pool if requested. The **no** version removes the association between the address pool and the domain name.

From IPsec Identity mode, specifies the domain name that the router uses in IKE authentication messages and to generate certificate requests. The **no** version removes the domain name.

Syntax From DHCP Local Pool Configuration mode:
domain-name *domainName*
no domain-name

- *domainName*—Name of the domain

From IPsec Identity Configuration mode:
[no] domain-name *domainName*

- *domainName*—Name used in certificate requests and in IKE authentication messages; up to 60 characters

Mode DHCP Local Pool Configuration, IPsec Identity Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

domain-suffix

Description Appends a domain suffix to user-provided usernames on this profile. The **no** version restores the default value, no domain suffix, and usernames are passed transparently to AAA.

Syntax **domain-suffix** *domainSuffix*
no domain-suffix

- *domainSuffix*—Domain suffix that you want to append to user-provided usernames.

Mode IPsec Tunnel Profile Configuration

Release Information Command introduced in JUNOS Release 7.3.0.

domain-tag

Description	Sets the VPN route tag for an OSPF VRF on a PE to prevent routing loops back into the VPN. The no version restores the default value.
Syntax	domain-tag <i>routeTag</i> no domain-tag <ul style="list-style-type: none"> ■ <i>routeTag</i>—Number identifying the VPN route tag in the range 0–4294967295
Mode	Router Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

dont-install-routes

Description	Prevents OSPF routes that point directly to the OSPF remote neighbor from being installed in the IP routing table of the VR or VRF in which OSPF is running. The no version restores the default behavior, which installs the routes in the IP routing table.
Syntax	[no] dont-install-routes
Mode	Remote Neighbor Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

dos-protection-group

Description	Creates a denial of service (DoS) protection group and enters DoS Protection Group Configuration mode. The no version removes the DoS protection group.
Syntax	[no] dos-protection-group <i>groupName</i> <ul style="list-style-type: none"> ■ <i>groupName</i>—Name of the DoS protection group; string of up to 31 alphanumeric characters
Mode	Global Configuration
Release Information	Command introduced in JUNOS Release 8.1.0.

drop-profile

Description	Creates a drop profile. The no version removes the drop profile.
Syntax	[no] drop-profile <i>dropProfileName</i> <ul style="list-style-type: none">■ <i>dropProfileName</i>—Name for the drop profile
Mode	Global Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.
Related Topics	<ul style="list-style-type: none">■ Configuring RED■ Configuring WRED

ds3-scramble

Description	Enables scrambling of the ATM cell payload on a T3 interface. DS3 scrambling assists clock recovery on the receiving end of the interface. The no version disables cell scrambling.
Syntax	[no] ds3-scramble
Mode	Controller Configuration
Release Information	Command introduced before JUNOS Release 7.1.0.

dsr-detect

Description	Requires that a DSR signal be detected on the line for a user to log into the console. DSR is carried on pin 6 of the SRP module's RS-232 (DB-9) connector. The DSR input must be connected to the DSR output of a modem or the DTR output of another DTE device, such as a terminal server, that supports this signal. If a session is in progress and the DSR signal is lost, the user is logged out automatically. The no version restores the default of no DSR required.
Syntax	[no] dsr-detect
Mode	Privileged Exec
Release Information	Command introduced before JUNOS Release 7.1.0.

dsu bandwidth

Description Sets the speed for the fractional T3 lines. The **no** version clears the bandwidth. If you issue this command, be sure to issue the **dsu mode** and **scramble** commands. Similarly, if you issue the **no** version, be sure to issue the **no dsu mode** and **no scramble** commands; otherwise, the interface may drop packets unexpectedly.

Syntax dsu bandwidth *bandwidthValue*
no dsu bandwidth

- *bandwidthValue*—Value of the fractional bandwidth in the range 22–44210 Kbps. The router offers a set of speeds in increments that depend on the DSU mode you specify. The actual speed of the fractional T3 lines will be the value closest to the fractional bandwidth you specify.

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

dsu mode

Description Sets the DSU mode for the lines. The **no** version clears the dsu mode. If you issue this command, be sure to issue the **dsu bandwidth** and **scramble** commands. Similarly, if you issue the **no** version, be sure to issue the **no dsu bandwidth** and **no scramble** commands; otherwise, the interface may drop packets unexpectedly.

Syntax dsu mode { 0 | 2 }
no dsu mode

- 0—Sets digital Link mode
- 2—Sets Larscom mode

Mode Controller Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

duplex

Description Specifies the duplex mode for an Ethernet interface. This command works with the **speed** command; if you set or accept the automatically negotiate setting for either duplex mode or speed, the router negotiates both parameters with the remote device. The **no** version specifies the default value, automatically negotiate or full duplex (FE-8 SFP I/O module only). This command is not available for the Ethernet interface on the SRP module.

Syntax duplex *duplexMode*

no duplex

- *duplexMode*—One of the following duplex options
 - automatically negotiate—Specifies that the router negotiates duplex mode with the remote device; not valid for the FE-8 SFP I/O module
 - full—Specifies that the router uses full duplex on a Fast Ethernet or Gigabit Ethernet interface
 - half—Specifies that the router uses half duplex on a Fast Ethernet interface; this value is not valid for Gigabit Ethernet interfaces

Mode Interface Configuration

Release Information Command introduced before JUNOS Release 7.1.0.

dvmrp destination profile

Description Configures a destination profile for dynamic DVMRP tunnels and enters IP Tunnel Destination Profile Configuration mode. There is no **no** version.

Syntax dvmrp destination profile *profileName* { [any-virtual-router] | [virtual-router *virtualRouterName*] }

no dvmrp 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.