

Chapter 11

Summary of CLI Operational Mode Commands

The following sections explain each of the command-line interface (CLI) operational mode commands. The commands are organized alphabetically.

clear

Syntax	clear (arp bfd bgp chassis cli firewall igmp ilmi interfaces ipsec ipv6 isis ldp log mpls msdp multicast ospf ospf3 pgm pim pppoe rip route rsvp snmp system vpls vrrp)
Description	Clear statistics and protocol database information.
Usage Guidelines	Most clear commands are discussed in the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> . The following clear commands are discussed in the <i>JUNOS Network and Services Interface Command Reference</i> : clear ike, clear ilmi, clear interfaces, clear ipsec, clear pppoe
Required Privilege Level	clear

configure

Syntax	configure configure exclusive configure private
Description	Enter configuration mode.
Usage Guidelines	See “Entering Configuration Mode” on page 202.
Required Privilege Level	configure

file

Syntax	file (archive checksum compare copy delete list rename show)
Description	Copy files to and from the router, compare files, or delete a file on a local router.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, Chassis, and System Basics Command Reference</i> .
See Also	file archive on page 288.
Required Privilege Level	maintenance

file archive

Syntax	file archive <compress> source <i>source</i> destination <i>destination</i>
Description	Archive, and optionally compress, one or multiple local system files as a single file, locally or at a remote location.
Options	<p>compress—(Optional) Compress the archived file with the GNU zip (gzip) compression utility. The compressed files have the suffix .tgz.</p> <p><i>source</i>—Source of the original file or files. Specify the source as a URL or filename, as described in “How to Specify Filenames and URLs” on page 46.</p> <p><i>destination</i>—Destination of the archived file or files. Specify the destination as a URL or filename, as described in “How to Specify Filenames and URLs” on page 46. The JUNOS software adds one of the following suffixes if the destination filename does not already have it:</p> <p style="padding-left: 40px;">For archived files—the suffix .tar</p> <p style="padding-left: 40px;">For archived and compressed files—the suffix .tgz</p>
Required Privilege Level	maintenance
Sample Output: file archive for multiple files	<p>The following sample command archives all the message files in the local directory /var/log/messages as the single file messages-archive.tar in the same directory:</p> <pre>user@host> file archive source /var/log/messages* destination /var/log/messages-archive.tar /usr/bin/tar: Removing leading / from absolute path names in the archive. user@host></pre>
Sample Output: file archive for one file	<p>The following sample command archives one message file in the local directory /var/log/messages as the single file messages-archive.tar in the same directory:</p> <pre>user@host> file archive source /var/log/messages destination /var/log/messages-archive.tar /usr/bin/tar: Removing leading / from absolute path names in the archive. user@host</pre>

Sample Output: file archive compress The following sample command archives and compresses all the message files in the local directory /var/log/messages as the single file messages-archive.tgz in the same directory:

```
user@host> file archive compress source /var/log/messages* destination
/var/log/messages-archive.tgz
/usr/bin/tar: Removing leading / from absolute path names in the archive.
user@host>
```

help

Syntax	help <(topic reference syslog tip (cli <number>))>
Description	Display help about available configuration statements or general information on getting help.
Options	<p>Display all hierarchy levels containing the statement.</p> <p>reference—Display summary information for the statement.</p> <p>syslog—Display system log messages.</p> <p>tip cli <number> —Display CLI tips that are associated with a number.</p> <p>topic—(Optional) Display usage guidelines for the statement.</p> <p>Entering the help command without an option provides introductory information on using the help and ? commands.</p>
Usage Guidelines	See “Getting Help Based on a String in a Statement Name” on page 164, “Displaying Tips About CLI Commands” on page 165, and “Configuring Tips” on page 386.
Required Privilege Level	None.

monitor

Syntax	monitor (interface label-switched-path list traffic start stop)
Description	Monitor a log file or interface traffic in real time.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	Depends on the specific command.

mtrace

Syntax	mtrace <i>source</i> <from-source monitor to-gateway>
Description	Display trace information about a multicast path.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	view

ping

Syntax	ping (host atm mpls mpls l2circuit mpls l2vpn mpls l3vpn)
Description	Check the reachability of network hosts.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	network

| (pipe)

Syntax	(compare count display (detail display set inheritance xml) except <i>pattern</i> find <i>pattern</i> hold last <i>lines</i> match <i>pattern</i> no-more request message (all <i>account@terminal</i>) resolve <full-names> save <i>filename</i> trim <i>columns</i>)
Description	Filter the output of an operational mode or a configuration mode command.
Options	<p>compare (filename rollback <i>n</i>)—(Configuration mode only, and only with the show command) Compare configuration changes with another configuration file.</p> <p>count—Display the number of lines in the output.</p> <p>display—Display additional information about the configuration contents.</p> <p>detail—(Configuration mode only) Display configuration data detail.</p> <p>inheritance <brief default groups terse>—(Configuration mode only) Display inherited configuration data and source group.</p> <p>set—Display the configuration as a series of configuration mode commands required to recreate the configuration.</p> <p>xml—(Operational mode only) Display the command output as JUNOScript (Extensible Markup Language [XML]) tags.</p> <p>except <i>pattern</i>—Ignore text matching a regular expression when searching the output. If the regular expression contains spaces, operators, or wildcard characters, enclose it in quotation marks.</p> <p>find <i>pattern</i>—Display the output starting at the first occurrence of text matching a regular expression. If the regular expression contains spaces, operators, or wildcard characters, enclose it in quotation marks (" ").</p>

last lines—Display the last number of lines you want to view from the end of the configuration. For more information about how to display the last number of lines from the end of the configuration, see “Displaying the Lines You Want to View from the End of the Output” on page 176.

hold—Hold text without exiting the *-More-* prompt.

match pattern—Search for text matching a regular expression. If the regular expression contains spaces, operators, or wildcard characters, enclose it in quotation marks.

no-more—Display output all at once rather than one screen at a time.

resolve—Convert IP addresses into Domain Name System (DNS) names. Truncates to fit original size unless *full-names* specified. To prevent the names from being truncated, use the *full-names* option.

request message (all | account@terminal)—Display command output on the terminal of a specific user logged in to your router, or on the terminals of all users logged in to your router.

save filename—Save the output to a file or URL. For information about specifying the filename, see “Specifying Filenames and URLs” on page 336.

trim columns—Trim specified number of columns from the start line.

Usage Guidelines See “Filtering Command Output” on page 170 and “Moving Among Levels of the Hierarchy” on page 218.

quit

Syntax quit

Description Exit from the CLI to a UNIX shell.

Required Privilege Level shell and maintenance

See Also start on page 296

request

Syntax request <chassis | ipsec switch | message | mpls | routing-engine | security | services | system | flow-collector | support information>

Description Stop or reboot router components, switch between primary and backup components, display messages, and display system information.



NOTE: If your routing platform contains two Routing Engines and you want to shut the power off to the routing platform or remove a Routing Engine, you must first halt the backup Routing Engine (if it has been upgraded) and then the master Routing Engine. To halt a Routing Engine, issue the request system halt command. You can also halt both Routing Engines at the same time by issuing the request system halt both-routing-engines command.

If you want to reboot a router that has two Routing Engines, reboot the backup Routing Engine (if you have upgraded it) and then the master Routing Engine.



CAUTION: Halt the backup Routing Engine before you remove it or shut off the power to the router; otherwise you might need to reinstall the JUNOS software.



NOTE: If you reboot the TX Matrix platform, all the T640 master Routing Engines connected to the TX Matrix platform reboot. If you halt both Routing Engines on a TX Matrix platform, all the T640s Routing Engines that are connected to the TX Matrix platform are also halted.

Usage Guidelines Most request commands are discussed in the *JUNOS Protocols, Class of Service, and System Basics Command Reference*. The following request commands are discussed in the *JUNOS Network and Services Interfaces Command Reference*: request ipsec switch and request services.

Required Privilege Level maintenance

request security certificate

See the following sections:

request security certificate (for CA Certificate) on page 293

request security certificate (for Signed Certificate) on page 293

request security certificate (for CA Certificate)

Syntax request security certificate enroll filename *filename* ca-file *ca-file* ca-name *ca-name* url *url*

Description Obtain a certificate from a certificate authority (CA). The results are saved in the specified file in the /var/etc/ikecert directory.

Options. ca-file *ca-file*—Name of certificate authority profile in configuration.

ca-name *ca-name*—Name of certificate authority

filename *filename*—File that stores the public key certificate.

url *url*—Certificate authority URL.

Required Privilege Level maintenance

Sample Output

```
user@host> request security certificate enroll filename ca_verisign ca-file verisign ca-name juniper.net url
http://pilotsiteipsec.verisign.com/cgi-bin/pkclient.exe
URL: http://pilotsiteipsec.verisign.com/cgi-bin/pkclient.exe CA name: juniper.net CA file: verisign Encoding: binary
Certificate enrollment has started. To view the status of your enrollment, check the key management process (kmd) log
file at /var/log/kmd. <-----
```

request security certificate (for Signed Certificate)

Syntax request security certificate enroll filename *filename* subject *subject* alternative-subject *alternative-subject* certificate-authority *certificate-authority* key-file *key-file* domain-name *domain-name*

Description Obtain a signed certificate from a certificate authority. The signed certificate validates the CA and the owner of the certificate. The results are saved in a specified file to the /var/etc/ikecert directory.

Options alternative-subject *alternative-subject*—A tunnel source address.

certification-authority *certificate-authority*—Name of certification authority profile in configuration.

domain-name *domain-name*—Fully qualified domain name.

filename *filename*—Name of file that stores the certificate.

key-file *key-file*—File containing a local private key.

subject *subject*—A distinguished name (DN), which consists of a set of components—for example, an organization (O), an organization unit (OU), a country (C), and a locality (L).

Required Privilege Level maintenance

Sample Output: user@host> request security certificate enroll filename host.crt subject c=uk,o=london alternative-subject 10.50.1.4 certification-authority verisign key-file host-1.prv domain-name host.juniper.net
 CA name: juniper.net CA file: ca_verisign
 local pub/private key pair: host.prv
 subject: c=uk,o=london domain name: host.juniper.net
 alternative subject: 10.50.1.4
 Encoding: binary
 Certificate enrollment has started. To view the status of your enrollment, check the key management process (kmd) log file at /var/log/kmd. <-----

restart

Syntax restart <adaptive-services | chassis-control | class-of-service | disk-monitoring | ecc-error-logging | firewall | interface-control | kernel-replication | I2tpd-service | mib-process | network-access-service | pgm | pic-services-logging | pppoe | remote-operations | routing <logical-router *logical-router-name*> | sampling | service-deployment | snmp> <gracefully | immediately | soft>

Description Restart router software processes on all platforms (with the exception of routing matrixes and J-series routers).

Usage Guidelines See the *JUNOS Protocols, Class of Service, and System Basics Command Reference*.

Required Privilege Level reset

restart (Routing Matrix)

Syntax restart <all | all-lcc | lcc *number*> <adaptive-services | chassis-control | class-of-service | disk-monitoring | ecc-error-logging | firewall | interface-control | kernel-replication | I2tpd-service | mib-process | network-access-service | pgm | pic-services-logging | pppoe | remote-operations | routing <logical-router *logical-router-name*> | sampling | service-deployment | snmp> <gracefully | immediately | soft>

Description Restart router software processes on a routing matrix.

Usage Guidelines See the *JUNOS Protocols, Class of Service, and System Basics Command Reference*.

Required Privilege Level reset

restart (J-Series Services)

Syntax restart <adaptive-services | chassis-control | class-of-service | firewall | interface-control | I2tpd-service | mib-process | network-access-service | pgm | pppoe | remote-operations | routing <logical-router *logical-router-name*> | sampling | service-deployment | snmp | usb-control | web-management> <gracefully | immediately | soft>

Description	Restart router software processes on J-Series routers.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	reset

restart routing

Syntax	restart routing <logical-router <i>logical-router-name</i> > <gracefully immediately soft>
Description	Restart the JUNOS software process on a logical router.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	reset

set

Syntax	set (chassis cli date)
Description	Configure chassis, CLI properties, and the router's date and time.
Usage Guidelines	See "Controlling the CLI Environment" on page 193 and "Setting the Current Date and Time" on page 180. For information about setting chassis properties, see the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	view

show

Syntax	show (accounting aps arp as-path bfd bgp chassis class-of-service cli configuration connections dvmrp dynamic-tunnels firewall helper host igmp ike ilmi interfaces ipsec ipv6 isis l2circuit l2vpn ldp link-management log mld mpls msdp multicast ntp ospf ospf3 passive-monitoring pfe pgm pim policer policy pppoe rip ripng route rsvp sap services snmp system task ted version vpls vrrp)
Description	Show information about all aspects of the software, including interfaces and routing protocols.
Usage Guidelines	Most show commands are discussed in the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> . The following show commands are discussed in the <i>JUNOS Network and Services Interfaces Command Reference</i> : show aps, show ike, show ilmi, show interfaces, show ipsec, show passive-monitoring, show pppoe, show services, and show vrrp.
Required Privilege Level	Depends on the specific command.

ssh

Syntax	ssh
Description	Open an SSH shell connected to another host.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	network

start

Syntax	start shell
Description	Start a UNIX shell on the router.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	shell and maintenance

telnet

Syntax	telnet
Description	Establish a Telnet connection to another host.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .
Required Privilege Level	network

test

Syntax	test (configuration interface msdp policy)
Description	Run various diagnostic debugging commands.
Usage Guidelines	Most of the test commands are discussed in the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> . The test interface command is discussed in the <i>JUNOS Network Services Interfaces Command Reference</i> .
Required Privilege Level	Depends on the specific command.

traceroute

Syntax	traceroute
Description	Trace the route to a remote host.
Usage Guidelines	See the <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> .

Required Privilege Level network

update

Syntax update

Description Update private candidate configuration with a copy of the most recently committed configuration, including your private changes.

Usage Guidelines See the “Updating the Configure Private Configuration” on page 207.



NOTE: The update command is only available when you are in configure private mode.
