

# Chapter 16

## Summary of CLI Configuration Mode Commands

The following sections explain each of the CLI configuration mode commands. The commands are organized alphabetically.

### activate

<b>Syntax</b>	activate ( <i>statement</i>   <i>identifier</i> )
<b>Description</b>	Remove the inactive: tag from a statement, effectively adding the statement or identifier back to the configuration. Statements or identifiers that have been activated take effect when you next issue the commit command.
<b>Options</b>	<i>identifier</i> —Identifier from which you are removing the inactive tag. It must be an identifier at the current hierarchy level.  <i>statement</i> —Statement from which you are removing the inactive tag. It must be a statement at the current hierarchy level.
<b>Usage Guidelines</b>	See “Deactivate and Reactivate Statements and Identifiers in a Configuration” on page 199.
<b>Required Privilege Level</b>	configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.
<b>See Also</b>	deactivate on page 242

## annotate

- Syntax** `annotate statement "comment-string"`
- Description** Add comments to a configuration. You can add comments only at the current hierarchy level.
- Any comments you add appear only when you view the configuration by entering the `show` command in configuration mode or the `show configuration` command in operational mode.
- Options** *comment-string*—Text of the comment. You must enclose it in quotation marks. In the comment string, you can include the comment delimiters `/* */` or `#`. If you do not specify any, the comment string is enclosed with the `/* */` comment delimiters. If a comment for the specified *statement* already exists, it is deleted and replaced with the new comment.
- statement*—Statement to which you are attaching the comment.
- Usage Guidelines** See "Add Comments in a Configuration" on page 200.
- Required Privilege Level** `configure`—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.
- See Also** See the description statement in the *JUNOS Internet Software Configuration Guide: Interfaces and Class of Service* .

## commit

- Syntax** commit < < at < *string*> > < and-quit> < check> < confirmed < *minutes*> > < synchronize>
- Description** Commit the set of changes to the database and cause the changes to take operational effect.
- Options** at < *string*>—(Optional) Save software configuration changes and activate the configuration at a future time, or upon reboot.

**Note**

If the JUNOS software fails before the configuration changes become active, all configuration changes are lost.

You cannot issue the commit at configuration command after you issue the request system reboot command.

You cannot issue the request system reboot command once you schedule a commit operation for a specific time in the future.

You cannot commit a configuration when a scheduled commit is pending. For information about how to use the clear command to cancel a scheduled configuration, see the *JUNOS Internet Software Guide: Operational Mode Command Reference*.

and-quit—(Optional) Commit the configuration and, if the configuration contains no errors and the commit succeeds, exit from configuration mode.

check—(Optional) Verify the syntax of the configuration, but do not activate it.

confirmed < *minutes*>—(Optional) Require that the commit be confirmed within the specified amount of time. To confirm a commit, enter either a commit or commit check command. If the commit is not confirmed within the time limit, the configuration rolls back automatically to the precommit configuration.

**Range:** 1 through 65,535 minutes

**Default:** 10 minutes

synchronize—(Optional) If your router has two Routing Engines, you can manually direct one Routing Engine to synchronize its configuration with the other by issuing the commit synchronize command. The Routing Engine on which you execute this command (request Routing Engine) copies and loads its candidate configuration to the other (responding Routing Engine). Both Routing Engines then perform a syntax check on the candidate configuration file being committed. If no errors are found, the configuration is activated and becomes the current operational configuration on both Routing Engines.

**Note**

When you issue the commit synchronize command, you must use the apply-groups re0 and re1 commands. For information about how to use groups, see “Apply a Configuration Group” on page 215.

The responding Routing Engine must use JUNOS release 5.0 or later.

**Usage Guidelines** See the sections “Verify a Configuration” on page 187, “Commit a Configuration” on page 187, “Schedule a Commit” on page 190, and “Synchronize Routing Engines” on page 191.

**Required Privilege Level** configure—To enter configuration mode.

## copy

**Syntax** *copy existing-statement to new-statement*

**Description** Make a copy of an existing statement in the configuration.

**Options** *existing-statement*—Statement to copy.

*new-statement*—Copy of the statement.

**Usage Guidelines** See “Copy a Statement in the Configuration” on page 182.

**Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

## deactivate

**Syntax** *deactivate (statement | identifier)*

**Description** Add the inactive: tag to a statement, effectively commenting out the statement or identifier from the configuration. Statements or identifiers marked as inactive do not take effect when you issue the commit command.

**Options** *identifier*—Identifier to which you are adding the inactive: tag. It must be an identifier at the current hierarchy level.

*statement*—Statement to which you are adding the inactive: tag. It must be a statement at the current hierarchy level.

**Usage Guidelines** See “Deactivate and Reactivate Statements and Identifiers in a Configuration” on page 199.

**Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

**See Also** activate on page 239, delete on page 243

## delete

**Syntax** delete < *statement-path*> < *identifier*>

**Description** Delete a statement or identifier. All subordinate statements and identifiers contained within the specified statement path are deleted with it.

Deleting a statement or an identifier effectively “unconfigures” or disables the functionality associated with that statement or identifier.

If you do not specify *statement-path* or *identifier*, the entire hierarchy starting at the current hierarchy level is removed.

**Options** *statement-path*—(Optional) Path to an existing statement or identifier. Include this if the statement or identifier to be deleted is not at the current hierarchy level.

*identifier*—(Optional) Name of the statement or identifier to delete.

**Usage Guidelines** See “Remove a Statement from the Configuration” on page 180.

**Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

**See Also** deactivate on page 242

## edit

**Syntax** edit *statement-path*

**Description** Move inside the specified statement hierarchy. If the statement does not exist, it is created.

You cannot use the edit command to change the value of identifiers. You must use the set command.

**Options** *statement-path*—Path to the statement.

**Usage Guidelines** See “Create and Modify the Configuration” on page 170.

**Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

**See Also** set on page 249

## exit

<b>Syntax</b>	exit < configuration-mode>
<b>Description</b>	Exit the current level of the statement hierarchy, returning to the level prior to the last edit command, or exit from configuration mode. The quit and exit commands are synonyms.
<b>Options</b>	none—Return to the previous edit level. If you are at the top of the statement hierarchy, exit configuration mode.  configuration-mode—(Optional) Exit from configuration mode.
<b>Usage Guidelines</b>	See “Move among Levels of the Hierarchy” on page 173.
<b>Required Privilege Level</b>	configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.
<b>See Also</b>	top on page 250, up on page 250

## help

<b>Syntax</b>	help (apropos   topic   reference) < <i>string</i> >
<b>Description</b>	Display help about available configuration statements.
<b>Options</b>	apropos—Display all hierarchy levels containing the statement.  reference—Display summary information for the statement.  <i>string</i> —String or regular expression matching configuration statements for which you need help.  topic—(Optional) Display usage guidelines for the statement.
<b>Usage Guidelines</b>	See “Get Help Based on a String in a Statement Name” on page 168.
<b>Required Privilege Level</b>	configure—To enter configuration mode.

## insert

<b>Syntax</b>	insert < <i>statement-path</i> > <i>identifier1</i> (before   after) <i>identifier2</i>
<b>Description</b>	Insert an identifier into an existing hierarchy.
<b>Options</b>	<p>after—Place <i>identifier1</i> after <i>identifier2</i>.</p> <p>before—Place <i>identifier1</i> before <i>identifier2</i>.</p> <p><i>identifier1</i>—Existing identifier.</p> <p><i>identifier2</i>—New identifier to insert.</p> <p><i>statement-path</i>—(Optional) Path to the existing identifier.</p>
<b>Usage Guidelines</b>	See “Insert a New Identifier” on page 183.
<b>Required Privilege Level</b>	configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

## load

<b>Syntax</b>	load (patch   replace   merge   override) ( <i>filename</i>   terminal ) relative
<b>Description</b>	Load a configuration from an ASCII configuration file or from terminal input. Your current location in the configuration hierarchy is ignored when the load operation occurs.
<b>Options</b>	<p><i>filename</i>—Name of the file to load. For information about specifying the filename, see “Specify Filenames and URLs” on page 260.</p> <p>merge—Combine the configuration that is currently shown in the CLI and the configuration in <i>filename</i>.</p> <p>override—Discard the entire configuration that is currently shown in the CLI and load the entire configuration in <i>filename</i>.</p> <p>patch—Change part of the configuration and mark only those parts as changed.</p> <p>replace—Look for a replace: tag in <i>filename</i>, delete the existing statement of the same name, and replace it with the configuration in <i>filename</i>.</p> <p>relative—Use the merge or replace option without specifying the full hierarchy level.</p> <p>terminal—Use the text you type at the terminal as input to the configuration. Type Ctrl-D to end terminal input.</p>
<b>Usage Guidelines</b>	See “Load a Configuration” on page 193.
<b>Required Privilege Level</b>	configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

## quit

- Syntax** quit < configuration-mode>
- Description** Exit the current level of the statement hierarchy, returning to the level prior to the last edit command, or exit from configuration mode. The quit and exit commands are synonyms.
- Options** none—Return to the previous edit level. If you are at the top of the statement hierarchy, exit configuration mode.
- configuration-mode—(Optional) Exit from configuration mode.
- Usage Guidelines** See “Move among Levels of the Hierarchy” on page 173.
- Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.
- See Also** top on page 250, up on page 250

## rename

- Syntax** rename < *statement-path*> *identifier1* to *identifier2*
- Description** Rename an existing configuration statement or identifier.
- Options** *identifier1*—Existing identifier to rename.
- identifier2*—New name of identifier.
- statement-path*—(Optional) Path to an existing statement or identifier.
- Usage Guidelines** See “Rename an Identifier” on page 183.
- Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

## rollback

**Syntax** rollback < *number*>

**Description** Return to a previously committed configuration. The software saves the last 50 committed configurations, including the rollback number, date, time, and name of the user who issued the commit configuration command.

The currently operational JUNOS software configuration is stored in the file `juniper.conf`, and the last three committed configurations are stored in the files `juniper.conf.1`, `juniper.conf.2`, and `juniper.conf.3`. These four files are located in the directory `/config`, which is on the router's flash drive. The remaining 46 previous committed configurations, the files `juniper.conf.4` through `juniper.conf.49`, are stored in the directory `/var/db/config`, which is on the router's hard disk.

**Options** none—Return to the most recently saved configuration.

*number*—Configuration to return to.

**Range:** 0 through 49. The most recently saved configuration is number 0, and the oldest saved configuration is number 49.

**Default:** 0

**Usage Guidelines** See “Return to a Previously Committed Configuration” on page 197.

**Required Privilege Level** rollback—To roll back to configurations other than the one most recently committed.

## run

**Syntax** run *command*

**Description** Run a top-level CLI command without exiting from configuration mode.

**Options** *command*—CLI top-level command.

**Usage Guidelines** See “Run an Operational Mode CLI Command from Configuration Mode” on page 186.

**Required Privilege Level** configure—To enter configuration mode.

## save

**Syntax** `save filename`

**Description** Save the configuration to an ASCII file. The contents of the current level of the statement hierarchy (and below) are saved, along with the statement hierarchy containing it. This allows a section of the configuration to be saved, while fully specifying the statement hierarchy.

When saving a file to a remote system, the software uses the scp/ssh protocol.

**Options** *filename*—Name of the saved file. You can specify a filename in one of the following ways:

*filename*—File in the user's home directory (the current directory) on the local flash drive.

*path/ filename*—File on the local flash drive.

*/var/ filename* or */var/ path/ filename*—File on the local hard disk.

*a: filename* or *a: path/ filename*—File on the local drive. The default path is / (the root-level directory). The removable media can be in MS-DOS or UNIX (UFS) format.

*hostname: / path/ filename*, *hostname: filename*, *hostname: path/ filename*, or *scp: / / hostname/ path/ filename*—File on an scp/ssh client. This form is not available in the worldwide version of the JUNOS software. The default path is the user's home directory on the remote system. You can also specify *hostname* as *username@hostname*.

*ftp: / / hostname/ path/ filename*—File on an FTP server. You can also specify *hostname* as *username@hostname* or *username: password@hostname*. The default path is the user's home directory. To specify an absolute path, the path must start with %2F; for example, *ftp: / / hostname/ %2F path/ filename*. To have the system prompt you for the password, specify *prompt* in place of the password. If a password is required, and you do not specify the password or prompt, an error message is displayed:

```
user@host > file copy ftp: / / username@ftp.hostname.net / / filename
file copy ftp.hostname.net: Not logged in.
user@host > file copy ftp: / / username:prompt@ftp.hostname.net / / filename
Password for username@ftp.hostname.net:
```

*http: / / hostname/ path/ filename*—File on an HTTP server. You can also specify *hostname* as *username@hostname* or *username: password@hostname*. If a password is required and you omit it, you are prompted for it.

*re0: / path/ filename* or *re1: / path/ filename*—File on a local Routing Engine.

**Usage Guidelines** See "Save a Configuration to a File" on page 192.

**Required Privilege Level** `configure`—To enter configuration mode.

## set

- Syntax** set < *statement-path*> *identifier*
- Description** Create a statement hierarchy and set identifier values. This is similar to edit except that your current level in the hierarchy does not change.
- Options** *identifier*—Name of the statement or identifier to set.
- statement-path*—(Optional) Path to an existing statement hierarchy level. If that hierarchy level does not exist, it is created.
- Usage Guidelines** See “Create and Modify the Configuration” on page 170.
- Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.
- See Also** edit on page 243

## show

- Syntax** show < *statement-path*> < *identifier*>
- Description** Display the current configuration.
- Options** none—Display the entire configuration at the current hierarchy level.
- identifier*—(Optional) Display the configuration for the specified identifier.
- statement-path*—(Optional) Display the configuration for the specified statement hierarchy path.
- Usage Guidelines** See “Display the Current Configuration” on page 177.
- Required Privilege Level** configure—To enter configuration mode; other required privilege levels depend on where the statement is located in the configuration hierarchy.

## status

- Syntax** status
- Description** Display the users currently editing the configuration.
- Usage Guidelines** See “Display Users Currently Editing the Configuration” on page 179.
- Required Privilege Level** configure—To enter configuration mode.

## top

- Syntax** top < *configuration-command*>
- Description** Return to the top level of configuration command mode, which is indicated by the [edit] banner.
- Option** *configuration-command*—Issue configuration mode commands from the top of the hierarchy.
- Usage Guidelines** See “Move among Levels of the Hierarchy” on page 173 and “Issue Relative Configuration Commands” on page 175.
- Required Privilege Level** configure—To enter configuration mode.
- See Also** exit on page 244, up on page 250

## up

- Syntax** up < *number*> < *configuration-command*>
- Description** Move up one level in the statement hierarchy.
- Options** none—Move up one level in the configuration hierarchy.
- number*—(Optional) Move up the specified number of levels in the configuration hierarchy.
- configuration-command*—Issue configuration mode commands from a location higher in the hierarchy.
- Usage Guidelines** See “Move among Levels of the Hierarchy” on page 173 and “Issue Relative Configuration Commands” on page 175.
- Required Privilege Level** configure—To enter configuration mode.
- See Also** exit on page 244, top on page 250