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# Junos<sup>®</sup> OS

## Access Privilege Configuration Guide

Release

# 10.4



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Juniper Networks, Inc.  
1194 North Mathilda Avenue  
Sunnyvale, California 94089  
USA  
408-745-2000  
www.juniper.net

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Writing: Edwin Skau, Ranjith Abraham, and Mahesh Anantharaman  
Editing: Stella Hackell, Nancy Kurahashi, Sonia Saruba, Joanne McClintock, and Ben Mann  
Cover Design: Edmonds Design

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# About This Guide

This preface provides the following guidelines for using the *Junos<sup>®</sup> OS Access Privilege Configuration Guide*:

- JUNOS Documentation and Release Notes on page xi
- Objectives on page xi
- Audience on page xii
- Supported Platforms on page xii
- Documentation Conventions on page xii
- Documentation Feedback on page xiv
- Requesting Technical Support on page xiv

## JUNOS Documentation and Release Notes

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For a list of related JUNOS documentation, see <http://www.juniper.net/techpubs/software/junos/>.

If the information in the latest release notes differs from the information in the documentation, follow the *JUNOS Release Notes*.

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## Objectives

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This guide describes how to configure access privileges for login classes in order to restrict the commands and statements available to users who manage your router. It also provides

a list of permission flags and their corresponding command-line interface (CLI) operational mode commands and configuration statements.



NOTE: For additional information about Junos OS—either corrections to or information that might have been omitted from this guide—see the software release notes at <http://www.juniper.net/>.

For information about configuration statements and guidelines related to the commands described in this reference, see the following configuration guides:

- *Junos OS CLI User Guide*
- *Junos OS Installation and Upgrade Guide*
- *Junos OS System Basics Configuration Guide*
- *Junos XML Management Protocol Guide*
- *Junos OS Network Management Configuration Guide*

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## Audience

This guide is designed for network administrators who are configuring and monitoring a Juniper Networks M Series, MX Series, T Series, EX Series, or J Series router or switch.

To use this guide, you need to know how to use the Junos OS command-line interface (CLI) operational mode commands and configuration statements. For more information about the Junos operational commands and configuration statements, see the *Junos OS CLI User Guide*.

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## Supported Platforms

For the features described in this manual, Junos OS currently supports the following platforms:

- J Series
- M Series
- MX Series
- T Series
- EX Series

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## Documentation Conventions

Table 1 on page xiii defines notice icons used in this guide.

Table 1: Notice Icons



Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates a situation that might result in loss of data or hardware damage.
	Warning	Alerts you to the risk of personal injury or death.
	Laser warning	Alerts you to the risk of personal injury from a laser.

Table 2 on page xiii defines the text and syntax conventions used in this guide.

Table 2: Text and Syntax Conventions

Convention	Description	Examples
<b>Bold text like this</b>	Represents text that you type.	To enter configuration mode, type the <b>configure</b> command:  <code>user@host&gt; configure</code>
Fixed-width text like this	Represents output that appears on the terminal screen.	<code>user@host&gt; show chassis alarms</code> <code>No alarms currently active</code>
<i>Italic text like this</i>	<ul style="list-style-type: none"> <li>Introduces important new terms.</li> <li>Identifies book names.</li> <li>Identifies RFC and Internet draft titles.</li> </ul>	<ul style="list-style-type: none"> <li>A policy <i>term</i> is a named structure that defines match conditions and actions.</li> <li><i>Junos System Basics Configuration Guide</i></li> <li>RFC 1997, <i>BGP Communities Attribute</i></li> </ul>
<i>Italic text like this</i>	Represents variables (options for which you substitute a value) in commands or configuration statements.	Configure the machine's domain name:  [edit] root@# <b>set system domain-name</b> <i>domain-name</i>
Text like this	Represents names of configuration statements, commands, files, and directories; IP addresses; configuration hierarchy levels; or labels on routing platform components.	<ul style="list-style-type: none"> <li>To configure a stub area, include the <b>stub</b> statement at the [edit protocols <b>ospf area area-id</b>] hierarchy level.</li> <li>The console port is labeled <b>CONSOLE</b>.</li> </ul>
< > (angle brackets)	Enclose optional keywords or variables.	<code>stub &lt;default-metric metric&gt;;</code>

Table 2: Text and Syntax Conventions (*continued*)

Convention	Description	Examples
(pipe symbol)	Indicates a choice between the mutually exclusive keywords or variables on either side of the symbol. The set of choices is often enclosed in parentheses for clarity.	<b>broadcast   multicast</b>  <i>(string1   string2   string3)</i>
# (pound sign)	Indicates a comment specified on the same line as the configuration statement to which it applies.	<b>rsvp { # Required for dynamic MPLS only</b>
[ ] (square brackets)	Enclose a variable for which you can substitute one or more values.	<b>community name members [ community-ids ]</b>
Indentation and braces ( { } )	Identify a level in the configuration hierarchy.	<b>[edit]</b> routing-options { static { route default { nexthop <i>address</i> ; retain; } } }
;(semicolon)	Identifies a leaf statement at a configuration hierarchy level.	
<b>J-Web GUI Conventions</b>		
<b>Bold text like this</b>	Represents J-Web graphical user interface (GUI) items you click or select.	<ul style="list-style-type: none"> <li>In the Logical Interfaces box, select <b>All Interfaces</b>.</li> <li>To cancel the configuration, click <b>Cancel</b>.</li> </ul>
> (bold right angle bracket)	Separates levels in a hierarchy of J-Web selections.	In the configuration editor hierarchy, select <b>Protocols&gt;Ospf</b> .

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- Document or topic name
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- Download the latest versions of software and review release notes: <http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <https://www.juniper.net/alerts/>
- Join and participate in the Juniper Networks Community Forum: <http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

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## Opening a Case with JTAC

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For international or direct-dial options in countries without toll-free numbers, visit us at <http://www.juniper.net/support/requesting-support.html>





## PART 1

# Configuring Access Privileges

- [Configuring and Customizing Access Privileges on page 3](#)
- [User Permission Flags on page 13](#)



## CHAPTER 1

# Configuring and Customizing Access Privileges

This section provides information about how you can configure user access privileges. It covers the use of permission flags for configuring user access privilege levels, and the use of regular expressions for configuring access to individual commands and statements.

- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Example: Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
- Example: Configuring Access Privileges for Operational Mode Commands on page 9
- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9
- Example: Defining Access Privileges for Configuration Mode Hierarchies on page 11

## Junos OS Access Privilege Levels Overview

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Each top-level command-line interface (CLI) command and each configuration statement has an access privilege level associated with it. Users can execute only those commands and configure and view only those statements for which they have access privileges. The access privileges for each login class are defined by one or more *permission flags*.

For each login class, you can explicitly deny or allow the use of operational and configuration mode commands that would otherwise be permitted or not allowed by a privilege level specified in the **permissions** statement.

The following sections provide additional information:

- Junos OS Login Class Permission Flags on page 3
- Allowing or Denying Individual Commands for Junos OS Login Classes on page 6

## Junos OS Login Class Permission Flags

The **permissions** statement specifies one or more of the permission flags listed in Table 3 on page 4. Permission flags are not cumulative, so for each class you must list all the permission flags needed, including **view** to display information and **configure** to enter

configuration mode. Two forms for the permissions control the individual parts of the configuration:

- “Plain” form—Provides read-only capability for that permission type. An example is **interface**.
- Form that ends in **-control**—Provides read and write capability for that permission type. An example is **interface-control**.

Table 3 on page 4 lists the Junos OS login class permission flags that you can configure by including the **permissions** statement at the **[edit system login class *class-name*]** hierarchy level:

**Table 3: Login Class Permission Flags**

Permission Flag	Description
<b>access</b>	Can view the access configuration in configuration mode using the <b>show configuration</b> operational mode command.
<b>access-control</b>	Can view and configure access information at the <b>[edit access]</b> hierarchy level.
<b>admin</b>	Can view user account information in configuration mode and with the <b>show configuration</b> command.
<b>admin-control</b>	Can view user accounts and configure them at the <b>[edit system login]</b> hierarchy level.
<b>all</b>	Has all permissions.
<b>clear</b>	Can clear (delete) information learned from the network that is stored in various network databases using the <b>clear</b> commands.
<b>configure</b>	Can enter configuration mode using the <b>configure</b> command.
<b>control</b>	Can perform all control-level operations—all operations configured with the <b>-control</b> permission flags.
<b>field</b>	Reserved for field (debugging) support.
<b>firewall</b>	Can view the firewall filter configuration in configuration mode.
<b>firewall-control</b>	Can view and configure firewall filter information at the <b>[edit firewall]</b> hierarchy level.
<b>floppy</b>	Can read from and write to the removable media.
<b>flow-tap</b>	Can view the flow-tap configuration in configuration mode.
<b>flow-tap control</b>	Can view the flow-tap configuration in configuration mode and can configure flow-tap configuration information at the <b>[edit services flow-tap]</b> hierarchy level.

Table 3: Login Class Permission Flags (*continued*)

Permission Flag	Description
<b>flow-tap-operation</b>	<p>Can make flow-tap requests to the router. For example, a Dynamic Tasking Control Protocol (DTCF) client must authenticate itself to Junos as an administrative user. That account must have <b>flow-tap-operation</b> permission.</p> <p>NOTE: <b>flow-tap operation</b> is not included in the <b>all</b> permission.</p>
<b>interface</b>	Can view the interface configuration in configuration mode and with the <b>show configuration</b> operational mode command.
<b>interface-control</b>	<p>Can view chassis, class of service (CoS), groups, forwarding options, and interfaces configuration information. Can edit configuration at the following hierarchy levels:</p> <ul style="list-style-type: none"> <li>• <b>[edit chassis]</b></li> <li>• <b>[edit class-of-service]</b></li> <li>• <b>[edit groups]</b></li> <li>• <b>[edit forwarding-options]</b></li> <li>• <b>[edit interfaces]</b></li> </ul>
<b>maintenance</b>	Can perform system maintenance, including starting a local shell on the router and becoming the superuser in the shell using the <b>su root</b> command, and can halt and reboot the router using the <b>request system</b> commands.
<b>network</b>	Can access the network by entering the <b>ping</b> , <b>SSH</b> , <b>telnet</b> , and <b>traceroute</b> commands.
<b>reset</b>	Can restart software processes using the <b>restart</b> command and can configure whether software processes are enabled or disabled at the <b>[edit system processes]</b> hierarchy level.
<b>rollback</b>	Can use the rollback command to return to a previously committed configuration other than the most recently committed one.
<b>routing</b>	Can view general routing, routing protocol, and routing policy configuration information in configuration and operational modes.
<b>routing-control</b>	Can view general routing, routing protocol, and routing policy configuration information and configure general routing at the <b>[edit routing-options]</b> hierarchy level, routing protocols at the <b>[edit protocols]</b> hierarchy level, and routing policy at the <b>[edit policy-options]</b> hierarchy level.
<b>secret</b>	Can view passwords and other authentication keys in the configuration.
<b>secret-control</b>	Can view passwords and other authentication keys in the configuration and can modify them in configuration mode.
<b>security</b>	Can view security configuration in configuration mode and with the <b>show configuration</b> operational mode command.
<b>security-control</b>	Can view and configure security information at the <b>[edit security]</b> hierarchy level.
<b>shell</b>	Can start a local shell on the router by entering the <b>start shell</b> command.

Table 3: Login Class Permission Flags (*continued*)

Permission Flag	Description
<b>snmp</b>	Can view Simple Network Management Protocol (SNMP) configuration information in configuration and operational modes.
<b>snmp-control</b>	Can view SNMP configuration information and modify SNMP configuration at the <b>[edit snmp]</b> hierarchy level.
<b>system</b>	Can view system-level information in configuration and operational modes.
<b>system-control</b>	Can view system-level configuration information and configure it at the <b>[edit system]</b> hierarchy level.
<b>trace</b>	Can view trace file settings in configuration and operational modes.
<b>trace-control</b>	Can view trace file settings and configure trace file properties.
<b>view</b>	Can use various commands to display current systemwide, routing table, and protocol-specific values and statistics. Cannot view secret configuration.

## Allowing or Denying Individual Commands for Junos OS Login Classes

By default, all top-level CLI commands have associated access privilege levels. Users can execute only those commands and view only those statements for which they have access privileges. For each login class, you can explicitly deny or allow the use of operational and configuration mode commands that would otherwise be permitted or not allowed by a privilege level specified in the **permissions** statement.



### NOTE:

- The all login class permission bits take precedence over extended regular expressions when a user with rollback permission issues the **rollback** command.
- Expressions used to allow and deny commands for users on RADIUS/TACACS+ servers have been simplified. Instead of a single, long expression with multiple commands (**allow-commands=cmd1 cmd2 ... cmdn**) you can specify each command as a separate expression. This new syntax is valid for **allow-configuration** and **deny-configuration**, **allow-command** and **deny-command**, and **user-permissions**.
- Users cannot issue the **load override** command when specifying an extended regular expression. Users can only issue the **merge**, **replace**, and **patch** configuration commands.

### Related Documentation

- [Configuring Access Privilege Levels on page 7](#)

## Configuring Access Privilege Levels

Each top-level command-line interface (CLI) command and each configuration statement has an access privilege level associated with it. Users can execute only those commands and configure and view only those statements for which they have access privileges.

To configure access privilege levels, include the **permissions** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login class class-name]  
permissions [ permissions ];
```

### Related Documentation

- Example: Configuring Access Privilege Levels on page 7
- Junos OS Access Privilege Levels Overview on page 3
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## Example: Configuring Access Privilege Levels

Create two access privilege classes on the router, one for configuring and viewing user accounts only and the second for configuring and viewing SNMP parameters only:

```
[edit]  
system {  
  login {  
    class user-accounts {  
      permissions [ configure admin admin-control ];  
    }  
    class network-mgmt {  
      permissions [ configure snmp snmp-control ];  
    }  
  }  
}
```

### Related Documentation

- Configuring Access Privilege Levels on page 7

## Specifying Access Privileges for Junos OS Operational Mode Commands

You can specify extended regular expressions with the **allow-commands** and **deny-commands** statements to define a user's access privileges to individual operational commands. Doing so takes precedence over login class permission bits set for a user. You can include one **deny-commands** and one **allow-commands** statement in each login class.

To explicitly allow an individual operational mode command that would otherwise be denied, include the **allow-commands** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login class class-name]  
allow-commands "regular-expression";
```

To explicitly deny an individual operational mode command that would otherwise be allowed, include the **deny-commands** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login class class-name]  
deny-commands "regular-expression";
```

If the regular expression contains any spaces, operators, or wildcard characters, enclose it in quotation marks. Regular expressions are not case-sensitive.



**NOTE:** Modifiers are not supported within the regular expression string to be matched. If a modifier is used, then nothing is matched.

For example, the deny command `set protocols` does not match anything whereas `protocols` matches *protocols*.

---

```
allow-commands "show interfaces";
```



**NOTE:**

- Explicitly allowing operational mode commands using the **allow-commands** statement adds to the regular permissions set using the **permissions** statement. Likewise, explicitly denying operational mode commands using the **deny-commands** statement removes permissions for the specified commands, from the default permissions provided by the **permissions** statement.

For example, if a login class has permissions `view` and the **allow-commands** statement includes the `request system software add` command, the specified login class user can install software, in addition to the permissions specified by the `view` permission flag. Likewise, if a login class has permissions `all` and the **deny-command** statement includes the `request system software add` command, the specified login class user can perform all operations allowed by the `all` permissions flag, except installing software issuing the `request system software add` command.

- If you allow and deny the same commands, the **allow-commands** permissions takes precedence over the permissions specified by the **deny-commands**. For example, if you include **allow-commands** `"request system software add"` and **deny-commands** `"request system software add"`, the login class user is allowed to install software using the `request system software add` command.

---

**Related Documentation**

- Example: Configuring Access Privileges for Operational Mode Commands on page 9
- Regular Expressions for Allowing and Denying Junos OS Operational Mode Commands



## Example: Configuring Access Privileges for Operational Mode Commands

The following example shows how to configure access privileges for different login classes for individual operational mode commands:

```
[edit]
system {
  # This login class has operator privileges and the additional ability
  # to reboot the router.
  login {
    # This login class has operator privileges and the additional ability to reboot the
    # router.
    class operator-and-boot {
      permissions [ clear network reset trace view ];
      allow-commands "request system reboot";
    }
    # This login class has operator privileges but can't use any commands beginning
    # with "set".
    # This login class has operator privileges
    # but cannot use any commands beginning with "set"
    class operator-no-set {
      permissions [ clear network reset trace view ];
      deny-commands "^set";
    }
    # This login class has operator privileges and can install software but not view
    # BGP information, and can issue the show route command, without specifying
    # commands or arguments under it.
    class operator-and-install-but-no-bgp {
      permissions [ clear network reset trace view ];
      allow-commands "(request system software add)|(show route$)";
      deny-commands "show bgp";
    }
  }
}
```

**Related Documentation**

- [Specifying Access Privileges for Junos OS Operational Mode Commands on page 7](#)

## Specifying Access Privileges for Junos OS Configuration Mode Hierarchies

You can specify extended regular expressions with the **allow-configuration** and **deny-configuration** attributes to define user access privileges to parts of the configuration hierarchy. Doing so overrides login class permission bits set for a user. You can also use wildcards to restrict access. When you define access privileges to parts of the configuration hierarchy, do the following:

- Specify the full paths in the extended regular expressions with the **allow-configuration** and **deny-configuration** attributes.
- Enclose parentheses around an extended regular expression that connects two or more expressions with the pipe | symbol. For example:

```
[edit system login class class-name]
user@host# set deny-configuration "(system login class) | (system services)"
```



NOTE: Each expression separated by a pipe (|) symbol must be a complete standalone expression, and must be enclosed in parentheses ( ). Do not use spaces between regular expressions separated with parentheses and connected with the pipe (|) symbol. You cannot define access to keywords such as **set**, **edit**, or **activate**.

To explicitly allow an individual configuration mode hierarchy that would otherwise be denied, include the **allow-configuration** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login class class-name]  
  allow-configuration "regular-expression";
```

To explicitly deny an individual configuration hierarchy that would otherwise be allowed, include the **deny-configuration** statement at the **[edit system login class *class-name*]** hierarchy level:

```
[edit system login class class-name]  
  deny-configuration "regular-expression";
```

You can include one **deny-configuration** and one **allow-configuration** statement in each login class.

**NOTE:**

- Explicitly allowing configuration mode hierarchies or regular expressions using the `allow-configuration` statement adds to the regular permissions set using the `permissions` statement. Likewise, explicitly denying configuration mode hierarchies or regular expressions using the `deny-configuration` statement removes permissions for the specified configuration mode hierarchy, from the default permissions provided by the `permissions` statement.

For example, if a login class has permissions `configure` and the `allow-configuration` statement includes the `system services` expression, the specified login class user can edit configuration at the `[edit system services]` hierarchy level and issue configuration mode commands (such as `commit`), in addition to just entering the configuration mode using the `configure` command (the permissions specified by the `configure` permission flag). Likewise, if a login class has permissions `all` and the `deny-configuration` statement includes `system services`, the specified login class user can perform all operations allowed by the `all` permissions flag, except issuing configuration mode commands (such as `commit`) or modifying configuration at the `[edit system services]` hierarchy level.

- If you allow and deny the same set of configuration hierarchy levels, regular expressions, or commands, the `allow-configuration` statement permissions take precedence over the permissions specified by the `deny-configuration` statement. For example, if you include `allow-configuration "system services"`; and `deny-configuration "system services"`, the login class user can continue to edit configuration or issue commands at the `edit system services` hierarchy level.

**Related Documentation**

- Example: Defining Access Privileges for Configuration Mode Hierarchies on page 11
- Regular Expressions for Allowing and Denying Junos OS Configuration Mode Hierarchies
- Configuring Access Privilege Levels on page 7

## Example: Defining Access Privileges for Configuration Mode Hierarchies

The following examples show how to configure access privileges for individual configuration mode hierarchy levels.

If the following statement is included in the configuration and the user's login class permission bit is set to **all**, the user cannot configure telnet parameters:

```
[edit system login class class-name]
user@host# set deny-configuration "system services telnet"
```

If the following statement is included in the configuration and the user's login class permission bit is set to **all**, the user cannot issue login class commands within any login class whose name begins with "m":

```
[edit system login class class-name]  
user@host# set deny-configuration "system login class m.*"
```

If the following statement is included in the configuration and the user's login class permission bit is set to **all**, the user cannot edit configuration or issue commands (such as **commit**) at the login class or system services hierarchy levels:

```
[edit system login class class-name]  
user@host# set deny-configuration "(system login class) | (system services)"
```

The following example shows how to configure permissions for individual configuration mode hierarchies:

```
[edit]  
system {  
  login { # This login class has operator privileges and the additional ability to edit  
           # configuration at the system services hierarchy level.  
    class only-system-services {  
      permissions [ configure ];  
      allow-configuration "system services";  
    }  
    # services commands.  
    class all-except-system-services { # This login class has operator privileges but  
                                       # cannot edit any system services configuration.  
      permissions [ all ];  
      deny-configuration "system services";  
    }  
  }  
}
```

**Related  
Documentation**

- [Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9](#)

## CHAPTER 2

# User Permission Flags

This section provides details about the permission flags that grant access to operational mode commands and configuration statements.



NOTE: Only permission flags that grant a specific set of access privileges are listed in this section. Those permission flags that provide no access, or provide access to all commands and statements do not appear in this list. For a complete list of permission flags, see Table 3 on page 4.

Permission flags are used to grant a user access to operational commands and configuration statements. By specifying a specific permission flag on that user's login class at the **[edit system login class]** hierarchy level, you grant the user access to the corresponding commands and configuration statements. To grant access to all commands and configuration statements, use the **all** permission flag.

For permission flags that grant access to configuration statements, the flag grants read-only privilege to that configuration. For example, the **interface** permission flag grants read-only access to the **[edit interfaces]** hierarchy level. The **-control** form of the flag grants read-write access to that configuration. Using the preceding example, **interface-control** grants read-write access to the **[edit interfaces]** hierarchy level.



NOTE: Each command listed represents that command and all subcommands with that command as a prefix. Each configuration statement listed represents the top of the configuration hierarchy to which that flag grants access.

The permission flags that effect access to operational mode commands and configuration statements are listed in alphabetical order in this section. Each permission flag is listed with the operational commands and configuration statements for which that flag grants access.

- Access Privilege User Permissions Flag Overview on page 14
- access on page 15
- admin on page 16
- clear on page 16

- configure on page 24
- control on page 24
- field on page 24
- firewall on page 25
- flow tap on page 25
- flow tap operation on page 26
- interface on page 26
- maintenance on page 27
- network on page 32
- pgcp-session-mirroring on page 34
- reset on page 34
- rollback on page 35
- routing on page 35
- security on page 39
- shell on page 41
- snmp on page 42
- system on page 42
- trace on page 43
- view on page 48
- view-configuration on page 86

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## Access Privilege User Permissions Flag Overview

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Permission flags are used to grant a user access to operational commands and configuration statements. By specifying a specific permission flag on the user's login class at the **[edit system login class]** hierarchy level, you grant the user access to the corresponding commands and configuration statements. To grant access to all commands and configuration statements, use the **all** permission flag.

For permission flags that grant access to configuration statements, the flag grants read-only privilege to that configuration. For example, the **interface** permission flag grants read-only access to the **[edit interfaces]** hierarchy level. The **-control** form of the flag grants read-write access to that configuration. Using the preceding example, **interface-control** grants read-write access to the **[edit interfaces]** hierarchy level.

The following list includes permission flags that grant a specific set of access privileges. Each permission flag is listed with the operational commands and configuration statements for which that flag grants access.



.....

**NOTE:** Each command listed represents that command and all subcommands with that command as a prefix. Each configuration statement listed represents the top of the configuration hierarchy to which that flag grants access.

.....

- access on page 15
- admin on page 16
- clear on page 16
- configure on page 24
- firewall on page 25
- flow tap on page 25
- interface on page 26
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- pgcp-session-mirroring on page 34
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- snmp on page 42
- system on page 42
- trace on page 43
- view on page 48

**Related  
Documentation**

- Junos OS Access Privilege Levels Overview on page 3

## access

Can view access configuration in configuration mode.

**Commands** No associated CLI commands.

**Statements**

```
[edit access]
[edit dynamic-profile]
[edit logical-systems access]
[edit logical-systems routing-instances instance system services static-subscribers
access-profile]
[edit logical-systems routing-instances instance system services static-subscribers
dynamic-profile]
[edit logical-systems routing-instances instance system services static-subscribers group
access-profile]
[edit logical-systems routing-instances instance system services static-subscribers group
dynamic-profile]
[edit logical-systems system services static-subscribers access-profile]
[edit logical-systems system services static-subscribers dynamic-profile]
[edit logical-systems system services static-subscribers group access-profile]
```

```
[edit logical-systems system services static-subscribers group dynamic-profile]
[edit routing-instances instance system services static-subscribers access-profile]
[edit routing-instances instance system services static-subscribers dynamic-profile]
[edit routing-instances instance system services static-subscribers group access-profile]
[edit routing-instances instance system services static-subscribers group dynamic-profile]
[edit system services static-subscribers access-profile]
[edit system services static-subscribers dynamic-profile]
[edit system services static-subscribers group access-profile]
[edit system services static-subscribers group dynamic-profile]
```

- Related Documentation**
- Access Privilege User Permissions Flag Overview on page 14
  - Junos OS Access Privilege Levels Overview on page 3
  - Configuring Access Privilege Levels on page 7
  - Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
  - Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

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## admin

Can view user account information in configuration mode.

**Commands**      `show system audit`

**Statements**      `[edit system]`  
`[edit system accounting]`  
`[edit system diag-port-authentication]`  
`[edit system extensions]`  
`[edit system login]`  
`[edit system pic-console-authentication]`  
`[edit system root-authentication]`  
`[edit system services ssh protocol-version]`  
`[edit system services ssh root-login]`

- Related Documentation**
- Access Privilege User Permissions Flag Overview on page 14
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## clear

Can clear (delete) information learned from the network that is stored in various network databases.

**Commands**      `clear`  
`clear amt`  
`clear amt statistics`  
`clear amt tunnel`



```
clear amt tunnel gateway-address
clear amt tunnel statistics
clear amt tunnel statistics gateway-address
clear amt tunnel statistics tunnel-interface
clear amt tunnel tunnel-interface
clear ancp
clear ancp neighbor
  <clear-ancp-neighbor-connection>

clear ancp subscriber
clear ancp subscriber identifier
  <clear-ancp-subscriber-identifier-information>

clear arp
  <clear-arp-table>

clear auto-configuration
clear auto-configuration interfaces

clear bfd
clear bfd adaptation
clear bfd adaptation address
clear bfd adaptation discriminator
clear bfd session
clear bfd session address
clear bfd session discriminator
clear bgp
clear bgp damping
  <clear-bgp-damping>

clear bgp neighbor
  <clear-bgp-neighbor>

clear bgp table
  <clear-bgp-table>

clear bridge
clear bridge mac-table
  <clear-bridge-mac-table>

clear bridge mac-table interface
  <clear-bridge-interface-mac-table>

clear cli
clear cli logical-system
clear database-replication
clear database-replication statistics
  <clear-database-replication-statistics-information>

clear dhcp
clear dhcp relay
clear dhcp relay binding
  <clear-dhcp-relay-binding-information>

clear dhcp relay binding interface
clear dhcp relay statistics
```

```
<clear-dhcp-relay-statistics-information>

clear dhcp server
clear dhcp server binding
  <clear-dhcp-server-binding-information>

clear dhcp server binding interface
clear dhcp server statistics
  <clear-server-statistics-information>

clear diameter

clear diameter function
  <clear-diameter-function>

clear diameter peer
  <clear-diameter-peer>

clear dot1x
clear dot1x interface
  <clear-dot1x-interface-session>

clear dot1x mac-address
  <clear-dot1x-mac-session>

clear error
clear error bpd
clear error bpd interface
clear error mac-rewrite
clear error mac-rewrite interface
clear esis
clear esis adjacency
clear esis statistics
clear firewall
clear firewall all
clear helper
clear helper statistics
  <clear-helper-statistics-information>

clear igmp
clear igmp membership
clear igmp snooping
clear igmp snooping membership
clear igmp snooping membership bridge-domain
clear igmp snooping statistics
clear igmp snooping statistics bridge-domain
clear igmp statistics
clear ike
clear ike security-associations
clear ilmi
clear ilmi statistics
clear interfaces
clear interfaces interface-set
clear interfaces interface-set statistics
clear interfaces interface-set statistics all
clear interfaces interval
```

```
clear interfaces mac-database
clear interfaces mac-database statistics
clear interfaces mac-database statistics all
clear interfaces statistics
  <clear-interfaces-statistics>

clear interfaces statistics all
  <clear-interfaces-statistics-all>

clear ipsec
clear ipsec security-associations
clear ipv6
clear ipv6 neighbors
  <clear-ipv6-nd-information>

clear ipv6 neighbors all
clear isis
clear isis adjacency
  <clear-isis-adjacency-information>

clear isis database
  <clear-isis-database-information>

clear isis overload
  <clear-isis-overload-information>

clear isis statistics
  <clear-isis-statistics-information>

clear l2-learning
clear l2-learning mac-move-buffer
clear l2-learning remote-backbone-edge-bridges
clear ldp
clear ldp neighbor
clear ldp session
clear lldp
clear lldp neighbors
clear lldp neighbors interface
clear lldp statistics
clear lldp statistics interface
clear mld
clear mld membership
clear mld statistics
clear mobile-ip
clear mobile-ip binding
clear mobile-ip binding all
  <clear-binding-all>

clear mobile-ip binding ip-address
  <clear-binding-ip>

clear mobile-ip binding nai
  <clear-binding-nai>

clear mobile-ip visitor
clear mobile-ip visitor all
```

```

    <clear-visitor-all>

clear mobile-ip visitor ip-address
    <clear-visitor-ip>

clear mobile-ip visitor nai
    <clear-visitor-nai>

clear mpls
clear mpls lsp
    <clear-mpls-lsp-information>

clear mpls static-lsp
    <clear-mpls-static-lsp-information>

clear mpls traceroute
clear mpls traceroute database
clear mpls traceroute database ldp
clear msdp
clear msdp cache
clear msdp statistics
clear multicast
clear multicast bandwidth-admission
clear multicast scope
clear multicast sessions
clear multicast statistics
clear mvrp
clear mvrp statistics
    <clear-mvrp-interface-statistics>

clear network-access
clear network-access aaa
clear network-access aaa statistics
    <clear-aaa-statistics-table>

clear network-access aaa statistics address-assignment
clear network-access aaa statistics address-assignment client
clear network-access aaa statistics address-assignment pool
clear network-access aaa subscriber
    <clear-aaa-subscriber-table>

clear network-access aaa subscriber statistics
    <clear-aaa-subscriber-table-specific-statistics>

clear network-access requests
clear network-access requests pending
    <clear-authentication-pending-table>

clear network-access requests statistics
    <clear-authentication-statistics>

clear network-access securid-node-secret-file
    <clear-node-secret-file>

clear oam
clear oam ethernet

```

```
clear oam ethernet connectivity-fault-management
clear oam ethernet connectivity-fault-management delay-statistics
  <clear-cfm-delay-statistics>

clear oam ethernet connectivity-fault-management path-database
  <clear-cfm-linktrace-path-database>

clear oam ethernet connectivity-fault-management policer
clear oam ethernet connectivity-fault-management statistics
  <clear-cfm-statistics>

clear oam ethernet link-fault-management
clear oam ethernet link-fault-management state
clear oam ethernet link-fault-management statistics
clear oam ethernet link-fault-management statistics action-profile
clear oam ethernet lmi
clear oam ethernet lmi statistics
  <clear-elmi-statistics>

clear ospf
clear ospf database
  <clear-ospf-database-information>

clear ospf io-statistics
  <clear-ospf-io-statistics-information>

clear ospf neighbor
  <clear-ospf-neighbor-information>

clear ospf overload
  <clear-ospf-overload-information>

clear ospf statistics
  <clear-ospf-statistics-information>

clear ospf3
clear ospf3 database
  <clear-ospf3-database-information>

clear ospf3 io-statistics
clear ospf3 neighbor
  <clear-ospf3-neighbor-information>

clear ospf3 overload
  <clear-ospf3-overload-information>

clear ospf3 statistics
  <clear-ospf3-io-statistics-information>

clear pgm
clear pgm negative-acknowledgments
clear pgm source-path-messages
clear pgm statistics
clear pim
clear pim join
clear pim register
```

```
clear pim statistics
clear ppp
clear ppp statistics
  <clear-ppp-statistics-information>

clear pppoe
clear pppoe sessions
clear pppoe statistics
clear pppoe statistics interfaces
clear protection-group
clear protection-group ethernet-ring
clear protection-group ethernet-ring statistics
clear rip
clear rip general-statistics
clear rip statistics
clear ripng
clear ripng general-statistics
clear ripng statistics
clear rsvp
clear rsvp session
  <clear-rsvp-session-information>

clear rsvp statistics
  < clear-rsvp-counters-information>

clear services application-identification
clear services application-identification application-system-cache
  <clear-appid-application-system-cache>

clear services application-identification counter
  <clear-appid-counter>

clear services border-signaling-gateway
clear services border-signaling-gateway denied-messages
  <clear-service-bsg-denied-messages>

clear services border-signaling-gateway name-resolution-cache
  <clear-service-border-signaling-gateway-name-resolution-cache>

clear services border-signaling-gateway name-resolution-cache all
  <clear-service-border-signaling-gateway-name-resolution-cache-all>

clear services border-signaling-gateway name-resolution-cache by-fqdn
clear services border-signaling-gateway statistics
  <clear-service-border-signaling-gateway-statistics>
clear services captive-portal-content-delivery
clear services captive-portal-content-delivery statistics
clear services captive-portal-content-delivery statistics interface
clear services ipsec-vpn ike
clear services ipsec-vpn ike security-associations
clear services l2tp
clear services l2tp destination
clear services software
clear services software statistics
clear services pgcp
clear services pgcp gates
```

```

<clear-service-pgcp-gates>

clear services pgcp gates gateway
  <clear-service-pgcp-gates-gateway>

clear services pgcp statistics
  <clear-service-pgcp-statistics>

clear services pgcp statistics gateway
  <clear-service-pgcp-statistics-gateway>

clear snmp
clear snmp statistics
clear spanning-tree
clear spanning-tree protocol-migration
clear spanning-tree protocol-migration interface
clear spanning-tree statistics
clear spanning-tree statistics interface
clear spanning-tree statistics routing-instance
clear spanning-tree topology-change-counter
clear synchronous-ethernet
clear synchronous-ethernet esmc
clear synchronous-ethernet esmc statistics
clear system

<clear-dhcp-binding-information>

<clear-dhcp-conflict-information>

<clear-dhcp-statistics-information>

clear vpls
clear vpls mac-address
clear vpls mac-table
  <clear-vpls-mac-table>

clear vpls mac-table interface
  <clear-vpls-interface-mac-table>

clear vrrp
clear vrrp interface
request services ipsec-vpn ipsec
request services ipsec-vpn ipsec switch
request services ipsec-vpn ipsec switch tunnel

```

#### Related Documentation

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## configure

---

	Can enter configuration mode.
<b>Commands</b>	<code>configure</code> <code>request snmp</code>
<b>Statements</b>	No associated configuration statements.
<b>Related Documentation</b>	<ul style="list-style-type: none"><li>• Access Privilege User Permissions Flag Overview on page 14</li><li>• Junos OS Access Privilege Levels Overview on page 3</li><li>• Configuring Access Privilege Levels on page 7</li><li>• Specifying Access Privileges for Junos OS Operational Mode Commands on page 7</li><li>• Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9</li></ul>

## control

---

	Can perform all control-level operations; can modify any configuration.
<b>Commands</b>	<code>test configuration</code>
<b>Statements</b>	No associated configuration statements.
<b>Related Documentation</b>	<ul style="list-style-type: none"><li>• Access Privilege User Permissions Flag Overview on page 14</li><li>• Junos OS Access Privilege Levels Overview on page 3</li><li>• Configuring Access Privilege Levels on page 7</li><li>• Specifying Access Privileges for Junos OS Operational Mode Commands on page 7</li><li>• Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9</li></ul>

## field

---

	Can view field debug commands.
<b>Commands</b>	No associated CLI commands
<b>Statements</b>	No associated CLI configuration statements
<b>Related Documentation</b>	<ul style="list-style-type: none"><li>• Access Privilege User Permissions Flag Overview on page 14</li><li>• Junos OS Access Privilege Levels Overview on page 3</li><li>• Configuring Access Privilege Levels on page 7</li><li>• Specifying Access Privileges for Junos OS Operational Mode Commands on page 7</li></ul>



- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## firewall

Can view firewall filter configuration in configuration mode.

<b>Commands</b>	<code>show firewall</code>
	<code>&lt;get-firewall-information&gt;</code>
	<code>show firewall counter</code>
	<code>&lt;get-firewall-counter-information&gt;</code>
	<code>show firewall filter</code>
	<code>&lt;get-firewall-filter-information&gt;</code>
	<code>show firewall filter version</code>
<b>Statements</b>	<code>&lt;get-filter-version&gt;</code>
	<code>show firewall log</code>
	<code>&lt;get-firewall-log-information&gt;</code>
	<code>show firewall prefix-action-stats</code>
	<code>&lt;get-firewall-prefix-action-information&gt;</code>
<b>Related Documentation</b>	<code>show policer</code>

- Access Privilege User Permissions Flag Overview on page 14
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## flow tap

Can view the flow-tap configuration in configuration mode.

<b>Commands</b>	No associated CLI commands.
<b>Statements</b>	<code>[edit services flow-tap]</code>
	<code>[edit services radius-flow-tap]</code>
	<code>[edit system services flow-tap-dtcp]</code>

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- Junos OS Access Privilege Levels Overview on page 3

- [Configuring Access Privilege Levels on page 7](#)
- [Specifying Access Privileges for Junos OS Operational Mode Commands on page 7](#)
- [Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9](#)

## flow tap operation

---

Can tap flows.

**Commands** No associated CLI commands.

**Statements** No associated CLI configuration statements

**Related Documentation**

- [Access Privilege User Permissions Flag Overview on page 14](#)
- [Junos OS Access Privilege Levels Overview on page 3](#)
- [Configuring Access Privilege Levels on page 7](#)
- [Specifying Access Privileges for Junos OS Operational Mode Commands on page 7](#)
- [Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9](#)

## interface

---

Can view interface configuration in configuration mode.

**Commands** No associated CLI commands.

**Statements**

- [edit accounting-options]
- [edit chassis]
- [edit class-of-service]
- [edit class-of-service interfaces]
- [edit dynamic-profiles class-of-service]
- [edit dynamic-profiles class-of-service interfaces]
- [edit dynamic-profiles interfaces]
- [edit dynamic-profiles routing-instances instance system services dhcp-local-server]
- [edit dynamic-profiles routing-instances instance system services static-subscribers group]
- [edit forwarding-options]
- [edit interfaces]
- [edit jnx-example]
- [edit logical-systems forwarding-options]
- [edit logical-systems interfaces]
- [edit logical-systems routing-instances instance system services dhcp-local-server]
- [edit logical-systems routing-instances instance system services static-subscribers group]
- [edit logical-systems system services dhcp-local-server]
- [edit logical-systems system services static-subscribers group]
- [edit routing-instances instance system services dhcp-local-server]
- [edit routing-instances instance system services static-subscribers group]
- [edit services logging]

```
[edit services radius-flow-tap]
[edit services radius-flow-tap interfaces]
[edit system services dhcp-local-server]
[edit system services static-subscribers group]
```

- Related Documentation**
- Access Privilege User Permissions Flag Overview on page 14
  - Junos OS Access Privilege Levels Overview on page 3
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  - Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
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## maintenance

Can perform system maintenance, including starting a local shell on the router and becoming the superuser in the shell, and can halt and reboot the router.

**Commands**

```
clear system reboot
  <clear-reboot>

clear-system-services-reverse-information
file archive
monitor traffic
request chassis cb
request chassis cfeb
request chassis cfeb master
request chassis cip
request chassis fabric
request chassis fabric plane
request chassis feb
  <request-feb>

request chassis fpc
request chassis mcs
request chassis mic
request chassis pcg
request chassis pic
request chassis redundancy
request chassis redundancy feb
  <request-redundancy-feb>

request chassis scg
request chassis sfm
request chassis sfm master
request chassis sib
request chassis sib f13

request chassis sib f2s
request chassis spmb
request chassis ssb
request chassis ssb master
request chassis synchronization
```

```
request chassis synchronization switch
request chassis vcpu
request chassis vnpu
request l2circuit-switchover
request mpls
request mpls lsp
request mpls lsp adjust-autobandwidth
request security
request security certificate
request security certificate enroll
request security datapath-debug
request security datapath-debug action-profile
request security datapath-debug action-profile reload-all
    <reload-eedebg-action-profile>

request security idp
    <request-idp-security-package-load>

request security idp security-package
request security idp security-package download
    <request-idp-security-package-download>

request security idp security-package download version
    <request-idp-security-package-download-version>

request security idp security-package install
    <request-idp-security-package-install>

request security idp ssl-inspection
request security idp ssl-inspection key
request security idp ssl-inspection key add
    <request-idp-ssl-key-add>

request security idp ssl-inspection key delete
    <request-idp-ssl-key-delete>

request security key-pair
request security pki
request security pki ca-certificate
request security pki ca-certificate enroll
request security pki ca-certificate load
request security pki crl
request security pki crl load
request security pki generate-certificate-request
request security pki generate-key-pair
request security pki local-certificate
request security pki local-certificate enroll
request security pki local-certificate load
request services fips
request services fips authorize
request services fips authorize pic
request services fips zeroize
request services fips zeroize pic
request services flow-collector
request services flow-collector change-destination
    <request-services-flow-collector-destination>
```

```
request services ggsn
request services ggsn pdp
request services ggsn pdp terminate
request services ggsn pdp terminate apn
  <request-ggsn-terminate-contexts-apn>

request services ggsn pdp terminate context
  <request-ggsn-terminate-context>

request services ggsn pdp terminate context msisdn
  <request-ggsn-terminate-msisdn-context>

request services ggsn restart
request services ggsn restart interface
  <request-ggsn-restart-interface>

request services ggsn restart node
  <request-ggsn-restart-node>

request services ggsn start
request services ggsn start interface
request services ggsn stop
request services ggsn stop interface
  <request-ggsn-stop-interface>

request services ggsn stop node
  <request-ggsn-stop-node>

request services ggsn trace
request services ggsn trace software
request services ggsn trace software update
  <request-ggsn-software-update>

request services ggsn trace start
request services ggsn trace start imsi
  <request-ggsn-start-imsi-trace>

request services ggsn trace start msisdn
  <request-ggsn-start-msisdn-trace>

request services ggsn trace stop
request services ggsn trace stop all
  <request-ggsn-stop-trace-activity>

request services ggsn trace stop imsi
  <request-ggsn-stop-imsi-trace>

request services ggsn trace stop msisdn
  <request-ggsn-stop-msisdn-trace>

request support
request support information
request system
request system certificate
request system certificate add
```

```
request system configuration
request system configuration rescue
request system configuration rescue delete
  <request-delete-rescue-configuration>
```

```
request system configuration rescue save
  <request-save-rescue-configuration>
```

```
request system firmware
request system firmware downgrade
request system firmware downgrade feb
request system firmware downgrade fpc
request system firmware downgrade pic
request system firmware downgrade re
request system firmware downgrade scb
request system firmware downgrade sfm
request system firmware downgrade spmb
request system firmware downgrade ssb
request system firmware downgrade vcpu
request system firmware upgrade
request system firmware upgrade feb
request system firmware upgrade fpc
request system firmware upgrade pic
request system firmware upgrade re
request system firmware upgrade re bios
request system firmware upgrade scb
request system firmware upgrade sfm
request system firmware upgrade spmb
request system firmware upgrade ssb
request system firmware upgrade vcpu
request system halt
  <request-halt>
```

```
request system license
request system license add
request system license delete
  <request-license-delete>
```

```
request system license save
request system license update
....<request-license-update>
request system logout
request system partition
request system partition abort
request system partition compact-flash
request system partition hard-disk
request system power-off
  <request-power-off>
```

```
request system power-on
request system reboot
  <request-reboot>
```

```
request system scripts
request system scripts add
  <request-scripts-package-add>
```

```
request system scripts convert
request system scripts convert slax-to-xslt
request system scripts convert xslt-to-slax
request system scripts delete
  <request-scripts-package-delete>

request system scripts event-scripts
request system scripts event-scripts reload
  <reload-event-scripts>

request system scripts refresh-from
  <request-script-refresh-from>

request system scripts rollback
  <request-scripts-package-rollback>

request system snapshot
  <request-snapshot>

request system software
request system software abort
request system software abort in-service-upgrade
  <abort-in-service-upgrade>

request system software add
  <request-package-add>

request system software delete
  <request-package-delete>

request system software delete-backup
  <request-package-delete-backup>

request system software in-service-upgrade
  <request-package-in-service-upgrade>

request system software nonstop-upgrade
  <request-package-nonstop-upgrade>
request system software rollback
  <request-package-rollback>

request system software validate
  <request-package-validate>
request system software validate in-service-upgrade
  <check-in-service-upgrade>

request system storage
request system storage cleanup
  <request-system-storage-cleanup>

request system zeroize
request vpls-switchover
set date
set date ntpshow services fips
start shell
```

```
start shell user
test access
test access profile
  <get-radius-profile-access-test-result>

test access radius-server
  <get-radius-server-access-test-result>
```

**Statements**

```
[edit event-options]
[edit security ipsec internal]
[edit services dynamic-flow-capture traceoptions]
[edit services ggsn]
[edit services ggsn rule-space]
[edit system processes daemon-process command]
[edit system scripts]
[edit system scripts commit]
[edit system scripts op]
```

**Related  
Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
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**network**

---

Can access the network using the **ping**, **SSH**, **telnet**, and **traceroute** commands.

**Commands**

```
mtrace
mtrace from-source
mtrace monitor
mtrace to-gateway
ping
  <ping>

ping atm
ping clns
ping ethernet
  <request-ping-ethernet>

ping mpls
ping mpls l2circuit
ping mpls l2circuit interface
  <request-ping-l2circuit-interface>

ping mpls l2circuit virtual-circuit
  <request-ping-l2circuit-virtual-circuit>

ping mpls l2vpn
```



```
ping mpls l2vpn instance
  <request-ping-l2vpn-instance>

ping mpls l2vpn interface
  <request-ping-l2vpn-interface>

ping mpls l3vpn
  <request-ping-l3vpn>

ping mpls ldp
  <request-ping-ldp-lsp>

ping mpls ldp p2mp
  <request-ping-ldp-p2mp-lsp>

ping mpls lsp-end-point
  <request-ping-lsp-end-point>

ping mpls rsvp
  <request-ping-rsvp-lsp>

ping vpls
ping vpls instance
  <request-ping-vpls-instance>

request routing-engine
request routing-engine login
request routing-engine login other-routing-engine
request services flow-collector
request services flow-collector test-file-transfer
  <request-services-flow-collector-test-file-transfer>

show host
show interfaces level-extra descriptions
show multicast mrimfo
ssh
telnet
traceroute
  <traceroute>

traceroute clns
traceroute ethernet
  <request-traceroute-ethernet>

traceroute monitor
traceroute mpls
traceroute mpls ldp
traceroute mpls rsvp
```

**Related  
Documentation**

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- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7

- [Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9](#)

## [pgcp-session-mirroring](#)

---

Can view session mirroring configuration for the **pgcp** command.

<b>Commands</b>	show services pgcp gates gate-way display session-mirroring
<b>Statements</b>	[edit services pgcp gateway session-mirroring] [edit services pgcp session-mirroring]
<b>Related Documentation</b>	<ul style="list-style-type: none"><li>• <a href="#">Access Privilege User Permissions Flag Overview on page 14</a></li><li>• <a href="#">Junos OS Access Privilege Levels Overview on page 3</a></li><li>• <a href="#">Configuring Access Privilege Levels on page 7</a></li><li>• <a href="#">Specifying Access Privileges for Junos OS Operational Mode Commands on page 7</a></li><li>• <a href="#">Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9</a></li></ul>

## [reset](#)

---

Can restart software processes, and can configure whether software processes are enabled or disabled.

<b>Commands</b>	request chassis cfeb master switch request chassis cfeb master switch no-confirm request chassis sfm master switch request chassis sfm master switch no-confirm request chassis ssb master switch request chassis ssb master switch no-confirm restart restart kernel-replication restart routing restart services restart services pgcp restart web-management
<b>Statements</b>	No associated configuration statements.
<b>Related Documentation</b>	<ul style="list-style-type: none"><li>• <a href="#">Access Privilege User Permissions Flag Overview on page 14</a></li><li>• <a href="#">Junos OS Access Privilege Levels Overview on page 3</a></li><li>• <a href="#">Configuring Access Privilege Levels on page 7</a></li><li>• <a href="#">Specifying Access Privileges for Junos OS Operational Mode Commands on page 7</a></li><li>• <a href="#">Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9</a></li></ul>

## rollback

Can rollback to previous configurations.

**Commands** No associated CLI commands.

**Statements** [edit]

**Related Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
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## routing

Can view general routing, routing protocol, and routing policy configuration information.

**Commands** No associated CLI commands.

**Statements**

- [edit bridge-domains]
- [edit bridge-domains domain multicast-snooping-options]
- [edit bridge-domains domain multicast-snooping-options traceoptions]
- [edit dynamic-profiles protocols igmp traceoptions]
- [edit dynamic-profiles protocols mld traceoptions]
- [edit dynamic-profiles protocols router-advertisement traceoptions]
- [edit dynamic-profiles routing-instances]
- [edit dynamic-profiles routing-instances instance bridge-domains]
- [edit dynamic-profiles routing-instances instance bridge-domains domain multicast-snooping-options]
- [edit dynamic-profiles routing-instances instance bridge-domains domain multicast-snooping-options traceoptions]
- [edit dynamic-profiles routing-instances instance multicast-snooping-options]
- [edit dynamic-profiles routing-instances instance multicast-snooping-options traceoptions]
- [edit dynamic-profiles routing-instances instance pbb-options]
- [edit dynamic-profiles routing-instances instance protocols]
- [edit dynamic-profiles routing-instances instance protocols bgp group neighbor traceoptions]
- [edit dynamic-profiles routing-instances instance protocols bgp group traceoptions]
- [edit dynamic-profiles routing-instances instance protocols bgp traceoptions]
- [edit dynamic-profiles routing-instances instance protocols esis traceoptions]
- [edit dynamic-profiles routing-instances instance protocols isis traceoptions]
- [edit dynamic-profiles routing-instances instance protocols l2vpn traceoptions]
- [edit dynamic-profiles routing-instances instance protocols ldp traceoptions]
- [edit dynamic-profiles routing-instances instance protocols msdp group peer traceoptions]
- [edit dynamic-profiles routing-instances instance protocols msdp group traceoptions]

```
[edit dynamic-profiles routing-instances instance protocols msdp peer traceoptions]
[edit dynamic-profiles routing-instances instance protocols msdp traceoptions]
[edit dynamic-profiles routing-instances instance protocols mvpn traceoptions]
[edit dynamic-profiles routing-instances instance protocols ospf traceoptions]
[edit dynamic-profiles routing-instances instance protocols pim traceoptions]
[edit dynamic-profiles routing-instances instance protocols rip traceoptions]
[edit dynamic-profiles routing-instances instance protocols ripng traceoptions]
[edit dynamic-profiles routing-instances instance protocols router-discovery traceoptions]
[edit dynamic-profiles routing-instances instance protocols vpls traceoptions]
[edit dynamic-profiles routing-instances instance routing-options]
[edit dynamic-profiles routing-instances instance routing-options multicast traceoptions]
[edit dynamic-profiles routing-instances instance routing-options traceoptions]
[edit dynamic-profiles routing-instances instance service-groups]
[edit dynamic-profiles routing-instances instance switch-options]
[edit dynamic-profiles routing-options multicast traceoptions]
[edit jnx-example]
[edit fabric protocols]
[edit fabric protocols bgp group neighbor traceoptions]
[edit fabric protocols bgp group traceoptions]
[edit fabric protocols bgp traceoptions]
[edit fabric routing-instances]
[edit fabric routing-instances instance routing-options]
[edit fabric routing-instances instance routing-options traceoptions]
[edit fabric routing-options]
[edit fabric routing-options traceoptions]
[edit logical-systems bridge-domains]
[edit logical-systems bridge-domains domain multicast-snooping-options]
[edit logical-systems bridge-domains domain multicast-snooping-options traceoptions]
[edit logical-systems policy-options]
[edit logical-systems protocols]
[edit logical-systems protocols bgp group neighbor traceoptions]
[edit logical-systems protocols bgp group traceoptions]
[edit logical-systems protocols bgp traceoptions]
[edit logical-systems protocols dvmrp traceoptions]
[edit logical-systems protocols esis traceoptions]
[edit logical-systems protocols igmp traceoptions]
[edit logical-systems protocols igmp-host traceoptions]
[edit logical-systems protocols isis traceoptions]
[edit logical-systems protocols l2circuit traceoptions]
[edit logical-systems protocols l2iw traceoptions]
[edit logical-systems protocols ldp traceoptions]
[edit logical-systems protocols mld traceoptions]
[edit logical-systems protocols mld-host traceoptions]
[edit logical-systems protocols msdp group peer traceoptions]
[edit logical-systems protocols msdp group traceoptions]
[edit logical-systems protocols msdp peer traceoptions]
[edit logical-systems protocols msdp traceoptions]
[edit logical-systems protocols ospf traceoptions]
[edit logical-systems protocols pim traceoptions]
[edit logical-systems protocols rip traceoptions]
[edit logical-systems protocols ripng traceoptions]
[edit logical-systems protocols router-advertisement traceoptions]
[edit logical-systems protocols router-discovery traceoptions]
[edit logical-systems protocols rsvp traceoptions]
[edit logical-systems routing-instances]
[edit logical-systems routing-instances instance bridge-domains]
```

```
[edit logical-systems routing-instances instance bridge-domains domain
multicast-snooping-options]
[edit logical-systems routing-instances instance bridge-domains domain
multicast-snooping-options traceoptions]
[edit logical-systems routing-instances instance multicast-snooping-options]
[edit logical-systems routing-instances instance multicast-snooping-options
traceoptions]
[edit logical-systems routing-instances instance pbb-options]
[edit logical-systems routing-instances instance protocols]
[edit logical-systems routing-instances instance protocols bgp group neighbor
traceoptions]
[edit logical-systems routing-instances instance protocols bgp group traceoptions]
[edit logical-systems routing-instances instance protocols bgp traceoptions]
[edit logical-systems routing-instances instance protocols esis traceoptions]
[edit logical-systems routing-instances instance protocols isis traceoptions]
[edit logical-systems routing-instances instance protocols l2vpn traceoptions]
[edit logical-systems routing-instances instance protocols ldp traceoptions]
[edit logical-systems routing-instances instance protocols msdp group peer traceoptions]
[edit logical-systems routing-instances instance protocols msdp group traceoptions]
[edit logical-systems routing-instances instance protocols msdp peer traceoptions]
[edit logical-systems routing-instances instance protocols msdp traceoptions]
[edit logical-systems routing-instances instance protocols mvpn traceoptions]
[edit logical-systems routing-instances instance protocols ospf traceoptions]
[edit logical-systems routing-instances instance protocols pim traceoptions]
[edit logical-systems routing-instances instance protocols rip traceoptions]
[edit logical-systems routing-instances instance protocols ripng traceoptions]
[edit logical-systems routing-instances instance protocols router-discovery traceoptions]
[edit logical-systems routing-instances instance protocols vpls traceoptions]
[edit logical-systems routing-instances instance routing-options]
[edit logical-systems routing-instances instance routing-options multicast traceoptions]
[edit logical-systems routing-instances instance routing-options traceoptions]
[edit logical-systems routing-instances instance service-groups]
[edit logical-systems routing-instances instance switch-options]
[edit logical-systems routing-options]
[edit logical-systems routing-options multicast traceoptions]
[edit logical-systems routing-options traceoptions]
[edit logical-systems switch-options]
[edit multicast-snooping-options]
[edit multicast-snooping-options traceoptions]
[edit policy-options]
[edit protocols]
[edit protocols amt traceoptions]
[edit protocols bgp group neighbor traceoptions]
[edit protocols bgp group traceoptions]
[edit protocols bgp traceoptions]
[edit protocols dvmrp traceoptions]
[edit protocols esis traceoptions]
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[edit protocols mld-host traceoptions]
[edit protocols msdp group peer traceoptions]
```

```
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[edit protocols msdp peer traceoptions]
[edit protocols msdp traceoptions]
[edit protocols ospf traceoptions]
[edit protocols pim traceoptions]
[edit protocols rip traceoptions]
[edit protocols ripng traceoptions]
[edit protocols router-advertisement traceoptions]
[edit protocols router-discovery traceoptions]
[edit protocols rsvp traceoptions]
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[edit routing-instances instance bridge-domains domain multicast-snooping-options]
[edit routing-instances instance bridge-domains domain multicast-snooping-options
traceoptions]
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[edit routing-instances instance multicast-snooping-options traceoptions]
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[edit routing-instances instance protocols]
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[edit routing-instances instance protocols bgp traceoptions]
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[edit routing-instances instance protocols rip traceoptions]
[edit routing-instances instance protocols ripng traceoptions]
[edit routing-instances instance protocols router-discovery traceoptions]
[edit routing-instances instance protocols vpls traceoptions]
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[edit routing-instances instance routing-options multicast traceoptions]
[edit routing-instances instance routing-options traceoptions]
[edit routing-instances instance service-groups]
[edit routing-instances instance switch-options]
[edit routing-options]
[edit routing-options multicast traceoptions]
[edit routing-options traceoptions]
[edit switch-options]
```

**Related  
Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## security

Can view security configuration.

### Commands

```
clear security
clear security idp
clear security idp application-ddos
clear security idp application-ddos cache
  <clear-idp-appddos-cache>

clear security idp application-identification
clear security idp application-identification application-system-cache
  <clear-idp-application-system-cache>

clear security idp application-statistics
  <clear-idp-applications-information>

clear security idp attack
clear security idp attack table
  <clear-idp-attack-table>

clear security idp counters
  <clear-idp-counters-by-counter-class>

clear security idp ssl-inspection
clear security idp ssl-inspection session-id-cache
  <clear-idp-ssl-session-cache-information>

clear security idp status
  <clear-idp-status-information>

clear security pki
clear security pki ca-certificate
clear security pki certificate-request
clear security pki crl
clear security pki local-certificate
request security
request security certificate
request security certificate enroll
request security datapath-debug
request security datapath-debug action-profile
request security datapath-debug action-profile reload-all
request security idp
  <request-idp-security-package-load>

request security idp security-package
request security idp security-package download
  <request-idp-security-package-download>

request security idp security-package download version
  <request-idp-security-package-download-version>

request security idp security-package install
  <request-idp-security-package-install>
```

```

request security idp ssl-inspection
request security idp ssl-inspection key
request security idp ssl-inspection key add
    <request-idp-ssl-key-add>

request security idp ssl-inspection key delete
    <request-idp-ssl-key-delete>

request security key-pair
request security pki
request security pki ca-certificate
request security pki ca-certificate enroll
request security pki ca-certificate load
request security pki crl
request security pki crl load
request security pki generate-certificate-request
request security pki generate-key-pair
request security pki local-certificate
request security pki local-certificate enroll
request security pki local-certificate load
request system set-encryption-key
show security
show security idp
show security idp application-ddos
show security idp application-ddos application
    <get-idp-addos-application-information>

show security idp application-identification
show security idp application-identification application-system-cache
    <get-idp-application-system-cache>

show security idp application-statistics
    <get-idp-applications-information>

show security idp attack
show security idp attack table
    <get-idp-attack-table-information>

show security idp counters
    <get-idp-counter-information>

show security idp memory
    <get-idp-memory-information>

show security idp policies
    <get-idp-subscriber-policy-list>

show security idp policy-templates-list
    <get-idp-policy-template-information>

show security idp policy-commit-status
    <get-idp-policy-commit-status>

<get-idp-predefined-attack-groups>
<get-idp-predefined-attacks>

```



```

<get-idp-predefined-attack-group-filters>
  <get-idp-predefined-attack-filters>

<get-idp-recent-security-package-information>

show security idp security-package-version
  <get-idp-security-package-information>

show security idp ssl-inspection
show security idp ssl-inspection key
  <get-idp-ssl-key-information>

show security idp ssl-inspection session-id-cache
  <get-idp-ssl-session-cache-information>

show security idp status
  <get-idp-status-information>

show security idp status detail
  <get-idp-detail-status-information>

show security pki
show security pki ca-certificate
show security pki certificate-request
show security pki crl
show security pki local-certificate

```

**Statements** [edit security]

- Related Documentation**
- Access Privilege User Permissions Flag Overview on page 14
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## shell

Can start a local shell on the router.

**Commands** start shell  
start shell user

**Statements** No associated configuration statements.

- Related Documentation**
- Access Privilege User Permissions Flag Overview on page 14
  - Junos OS Access Privilege Levels Overview on page 3
  - Configuring Access Privilege Levels on page 7

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## snmp

---

Can view Simple Network Management Protocol (SNMP) configuration.

**Commands** No associated CLI commands.

**Statements** [edit snmp]

**Related Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
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- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## system

---

Can view system-level configuration information.

**Commands** request chassis synchronization  
request chassis synchronization switch

**Statements** [edit applications]  
[edit chassis system-domains]  
[edit dynamic-profiles routing-instances instance forwarding-options helpers tftp]  
[edit dynamic-profiles routing-instances instance routing-options fate-sharing]  
[edit forwarding-options helpers bootp]  
[edit forwarding-options helpers domain]  
[edit forwarding-options helpers port]  
[edit forwarding-options helpers tftp]  
[edit logical-systems]  
[edit logical-systems routing-instances instance forwarding-options helpers bootp]  
[edit logical-systems routing-instances instance forwarding-options helpers domain]  
[edit logical-systems routing-instances instance forwarding-options helpers port]  
[edit logical-systems routing-instances instance forwarding-options helpers tftp]  
[edit logical-systems routing-instances instance routing-options fate-sharing]  
[edit logical-systems routing-options fate-sharing]  
[edit logical-systems system]  
[edit routing-instances instance forwarding-options helpers bootp]  
[edit routing-instances instance forwarding-options helpers domain]  
[edit routing-instances instance forwarding-options helpers port]  
[edit routing-instances instance forwarding-options helpers tftp]  
[edit routing-instances instance routing-options fate-sharing]  
[edit routing-options fate-sharing]  
[edit services]  
[edit services ggsn charging charging-log traceoptions]  
[edit system]

[edit system archival]  
[edit system backup-router]  
[edit system compress-configuration-files]  
[edit system default-address-selection]  
[edit system domain-name]  
[edit system domain-search]  
[edit system encrypt-configuration-files]  
[edit system host-name]  
[edit system inet6-backup-router]  
[edit system internet-options gre-path-mtu-discovery]  
[edit system internet-options ipip-path-mtu-discovery]  
[edit system internet-options ipv6-path-mtu-discovery]  
[edit system internet-options ipv6-path-mtu-discovery-timeout]  
[edit system internet-options ipv6-reject-zero-hop-limit]  
[edit system internet-options no-tcp-reset]  
[edit system internet-options no-tcp-rfc1323]  
[edit system internet-options no-tcp-rfc1323-paws]  
[edit system internet-options path-mtu-discovery]  
[edit system internet-options source-port upper-limit]  
[edit system internet-options source-quench]  
[edit system internet-options tcp-drop-synfin-set]  
[edit system internet-options tcp-mss]  
[edit system license]  
[edit system max-configuration-rollback]  
[edit system max-configurations-on-flash]  
[edit system mirror-flash-on-disk]  
[edit system name-server]  
[edit system no-multicast-echo]  
[edit system no-neighbor-learn]  
[edit system no-redirects]  
[edit system ports auxiliary log-out-on-disconnect]  
[edit system ports console log-out-on-disconnect]  
[edit system processes]  
[edit system saved-core-context]  
[edit system saved-core-files]  
[edit system services]  
[edit system services web-management]  
[edit system static-host-mapping]  
[edit system syslog]  
[edit system time-zone]

**Related  
Documentation**

- [Access Privilege User Permissions Flag Overview on page 14](#)
- [Junos OS Access Privilege Levels Overview on page 3](#)
- [Configuring Access Privilege Levels on page 7](#)
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- [Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9](#)

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## trace

Can view trace file settings and configure trace file properties.

<b>Commands</b>	<pre>clear log monitor   &lt;request-monitor-ethernet-delay-measurement&gt;  monitor interface monitor interface traffic monitor label-switched-path monitor list monitor start monitor static-lsp monitor stop show log show log user   &lt;get-syslog-events&gt;</pre>
<b>Statements</b>	<pre>[edit bridge-domains domain forwarding-options dhcp-relay traceoptions] [edit bridge-domains domain forwarding-options dhcp-relay interface-traceoptions] [edit bridge-domains domain multicast-snooping-options traceoptions] [edit bridge-domains domain protocols igmp-snooping traceoptions] [edit demux traceoptions] [edit dynamic-profiles protocols igmp traceoptions] [edit dynamic-profiles protocols mld traceoptions] [edit dynamic-profiles protocols router-advertisement traceoptions] [edit dynamic-profiles routing-instances instance bridge-domains domain forwarding-options dhcp-relay traceoptions] [edit dynamic-profiles routing-instances instance bridge-domains domain multicast-snooping-options traceoptions] [edit dynamic-profiles routing-instances instance bridge-domains domain protocols igmp-snooping traceoptions] [edit dynamic-profiles routing-instances instance forwarding-options dhcp-relay traceoptions] [edit dynamic-profiles routing-instances instance multicast-snooping-options traceoptions] [edit dynamic-profiles routing-instances instance protocols bgp group neighbor traceoptions] [edit dynamic-profiles routing-instances instance protocols bgp group traceoptions] [edit dynamic-profiles routing-instances instance protocols bgp traceoptions] [edit dynamic-profiles routing-instances instance protocols esis traceoptions] [edit dynamic-profiles routing-instances instance protocols igmp-snooping traceoptions] [edit dynamic-profiles routing-instances instance protocols isis traceoptions] [edit dynamic-profiles routing-instances instance protocols l2vpn traceoptions] [edit dynamic-profiles routing-instances instance protocols ldp traceoptions] [edit dynamic-profiles routing-instances instance protocols msdp group peer traceoptions] [edit dynamic-profiles routing-instances instance protocols msdp group traceoptions] [edit dynamic-profiles routing-instances instance protocols msdp peer traceoptions] [edit dynamic-profiles routing-instances instance protocols msdp traceoptions] [edit dynamic-profiles routing-instances instance protocols mvpn traceoptions] [edit dynamic-profiles routing-instances instance protocols ospf traceoptions] [edit dynamic-profiles routing-instances instance protocols pim traceoptions] [edit dynamic-profiles routing-instances instance protocols rip traceoptions] [edit dynamic-profiles routing-instances instance protocols ripng traceoptions] [edit dynamic-profiles routing-instances instance protocols router-discovery traceoptions] [edit dynamic-profiles routing-instances instance protocols vpls traceoptions] [edit dynamic-profiles routing-instances instance routing-options multicast traceoptions]</pre>

```
[edit dynamic-profiles routing-instances instance routing-options traceoptions]
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[edit dynamic-profiles routing-instances instance system services dhcp-local-server
traceoptions]
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[edit fabric protocols bgp group neighbor traceoptions]
[edit fabric protocols bgp group traceoptions]
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[edit fabric routing-instances instance routing-options traceoptions]
[edit fabric routing-options traceoptions]
[edit forwarding-options dhcp-relay traceoptions]
[edit forwarding-options dhcp-relay interface-traceoptions]
[edit jnx-example traceoptions]
[edit logical-systems bridge-domains domain forwarding-options dhcp-relay
traceoptions]
[edit logical-systems bridge-domains domain forwarding-options dhcp-relay
interface-traceoptions]
[edit logical-systems bridge-domains domain multicast-snooping-options traceoptions]
[edit logical-systems bridge-domains domain protocols igmp-snooping traceoptions]
[edit logical-systems forwarding-options dhcp-relay traceoptions]
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[edit logical-systems protocols bgp group neighbor traceoptions]
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[edit logical-systems protocols lacp traceoptions]
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[edit logical-systems protocols mpls oam traceoptions]
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[edit logical-systems protocols oam ethernet link-fault-management traceoptions]
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```

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igmp-snooping traceoptions]
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[edit protocols esis traceoptions]
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[edit protocols igmp-host traceoptions]
[edit protocols ilmi traceoptions]
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[edit protocols l2circuit traceoptions]
[edit protocols l2iw traceoptions]
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[edit protocols layer2-control traceoptions]
[edit protocols ldp traceoptions]
[edit protocols mld traceoptions]
[edit protocols mld-host traceoptions]
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[edit protocols oam ethernet lmi traceoptions]
[edit protocols ospf traceoptions]
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[edit protocols ppp traceoptions]
[edit protocols ppp-service traceoptions]
[edit protocols pppoe traceoptions]
[edit protocols rip traceoptions]
[edit protocols ripng traceoptions]
[edit protocols router-advertisement traceoptions]
[edit protocols router-discovery traceoptions]
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traceoptions]
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traceoptions]
[edit routing-instances instance forwarding-options dhcp-relay traceoptions]
[edit routing-instances instance forwarding-options dhcp-relay interface-traceoptions]
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[edit routing-instances instance protocols bgp group traceoptions]
[edit routing-instances instance protocols bgp traceoptions]
[edit routing-instances instance protocols esis traceoptions]
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[edit routing-instances instance protocols msdp group traceoptions]
[edit routing-instances instance protocols msdp peer traceoptions]
```

```
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[edit routing-instances instance protocols mvpn traceoptions]
[edit routing-instances instance protocols ospf traceoptions]
[edit routing-instances instance protocols pim traceoptions]
[edit routing-instances instance protocols rip traceoptions]
[edit routing-instances instance protocols ripng traceoptions]
[edit routing-instances instance protocols router-discovery traceoptions]
[edit routing-instances instance protocols vpls traceoptions]
[edit routing-instances instance routing-options multicast traceoptions]
[edit routing-instances instance routing-options traceoptions]
[edit routing-instances instance system services dhcp-local-server traceoptions]
[edit routing-instances instance system services dhcp-local-server interface-traceoptions]
[edit routing-options multicast traceoptions]
[edit routing-options traceoptions]
[edit security idp traceoptions]
[edit services adaptive-services-pics traceoptions]
[edit services captive-portal-content-delivery]
[edit services l2tp traceoptions]
[edit services logging traceoptions]
[edit services mobile-ip traceoptions]
[edit system accounting traceoptions]
[edit system auto-configuration traceoptions]
[edit system license traceoptions]
[edit system processes datapath-trace-service traceoptions]
[edit system processes diameter-service traceoptions]
[edit system processes general-authentication-service traceoptions]
[edit system processes mac-validation traceoptions]
[edit system processes process-monitor traceoptions]
[edit system processes resource-cleanup traceoptions]
[edit system processes sdk-service traceoptions]
[edit system processes static-subscribers traceoptions]
[edit system services database-replication traceoptions]
[edit system services dhcp traceoptions]
[edit system services dhcp-local-server traceoptions]
[edit system services dhcp-local-server interface-traceoptions]
[edit system services local-policy-decision-function traceoptions]
[edit system services outbound-ssh traceoptions]
[edit system services service-deployment traceoptions]
```

**Related  
Documentation**

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**view**

Can view current system-wide, routing table, and protocol-specific values and statistics.

**Commands**

show



```
show accounting

show accounting profile
  <get-accounting-profile-information>

show accounting records
  <get-accounting-record-information>

show amt
show amt statistics
  <get-amt-statistics>
show amt summary
  <get-amt-summary>
show amt tunnel
....<get-amt-tunnel-information>
show amt tunnel gateway-address
show amt tunnel tunnel-interface
show ancp
show ancp cos
  <get-ancp-cos-information>

show ancp cos last-update
  <get-ancp-cos-last-update-information>

show ancp cos pending-update
  <get-ancp-cos-pending-information>

show ancp neighbor
  <get-ancp-neighbor-information>

show ancp subscriber
  <get-ancp-subscriber-information>

show ancp subscriber identifier
show ancp subscriber neighbor
show aps
show aps group
show aps interface
show arp
  <get-arp-table-information>

show as-path
show as-path domain
show auto-configuration
show auto-configuration interfaces
show bfd
show bfd session
  <get-bfd-session-information>

show bfd session address
show bfd session discriminator
show bfd session prefix
show bgp
show bgp bmp
show bgp group
  <get-bgp-group-information>
```

```

show bgp group rtf
  <get-bgp-rtf-information>

show bgp group traffic-statistics
  <get-bgp-traffic-statistics-information>

show bgp neighbor
  <get-bgp-neighbor-information>

show bgp neighbor orf
  <get-bgp-orf-information>

show bgp replication
show bgp summary
  <get-bgp-summary-information>

show bridge
show bridge domain
  <get-bridge-instance-information>

show bridge domain operational
show bridge flood
show bridge flood event-queue
  <get-bridge-domain-event-queue-information>

show bridge flood route
show bridge flood route all-ce-flood
  <get-show-bridge-domain-all-ce-flood-route-information>

show bridge flood route all-ve-flood
  <get-show-bridge-domain-ve-flood-route-information>

show bridge flood route alt-root-flood
  <get-bridge-domain-alt-root-flood-route-information>

show bridge flood route bd-flood
  <get-bridge-domain-bd-flood-route-information>

show bridge flood route mlp-flood
  <get-bridge-domain-mlp-flood-route-information>

show bridge flood route re-flood
  <get-bridge-domain-re-flood-route-information>

show bridge mac-table
  <get-bridge-mac-table>

show bridge mac-table interface
  <get-bridge-interface-mac-table>

show bridge statistics
  <get-bridge-statistics-information>

show chassis
show chassis alarms

```

```
<get-alarm-information>

show chassis cfeb
  <get-cfeb-information>

show chassis cip
show chassis craft-interface
  <get-craft-information>

show chassis environment
  <get-environment-information>

show chassis environment cb
  <get-environment-cb-information>

show chassis environment cip
  <get-environment-cip-information>

show chassis environment feb
  <get-environment-feb-information>

show chassis environment fpc
  <get-environment-fpc-information>

show chassis environment fpm
  <get-environment-fpm-information>

show chassis environment mcs
  <get-environment-mcs-information>

show chassis environment pcg
  <get-environment-pcg-information>

show chassis environment pem
  <get-environment-pem-information>

show chassis environment psu
  <get-environment-psu-information>

show chassis environment routing-engine
  <get-environment-re-information>

show chassis environment scg
  <get-environment-scg-information>

show chassis environment sfm
  <get-environment-sfm-information>

show chassis environment sib
  <get-environment-sib-information>

show chassis environment sib f13
show chassis environment sib f2s
show chassis ethernet-switch
show chassis ethernet-switch errors
show chassis ethernet-switch statistics
```

```
show chassis fabric
show chassis fabric errors
show chassis fabric errors fpc
  <get-fm-fpc-errors>

show chassis fabric errors sib
  <get-fm-sib-errors>

show chassis fabric errors sib f13
show chassis fabric errors sib f2s
show chassis fabric feb
show chassis fabric fpcs
  <get-fm-fpc-state-information>

show chassis fabric map
show chassis fabric plane
  <get-fm-plane-state-information>

show chassis fabric plane-location
show chassis fabric sibs
  <get-fm-sib-state-information>

show chassis fabric summary
  <get-fm-state-information>

show chassis fabric topology
show chassis fan
show chassis feb
  <get-feb-brief-information>

show chassis feb detail
  <get-feb-information>

show chassis firmware
  <get-firmware-information>

show chassis forwarding
  <get-fwdd-information>

show chassis fpc
  <get-fpc-information>

show chassis fpc pic-status
  <get-pic-information>

show chassis fpc-feb-connectivity
  <get-fpc-feb-connectivity-information>

show chassis hardware
  <get-chassis-inventory>

show chassis in-service-upgrade
show chassis ioc-npc-connectivity
  <get-ioc-npc-connectivity-information>

show chassis lccs
```

```
<get-fru-information>

show chassis location
  <get-chassis-location>

show chassis location fpc
show chassis location interface
show chassis location interface by-name
  <get-interface-location-name-information>

show chassis location interface by-slot
  <get-interface-location-information>

show chassis network-services
  <network-services>

show chassis nonstop-upgrade
show chassis pic
  <get-pic-detail>

show chassis power
  <get-power-usage-information>

show chassis power sequence
show chassis power upgrade

show chassis power-ratings
  <get-power-management>

show chassis psd
  <get-psd-information>

show chassis redundancy
show chassis redundancy feb
  <get-feb-redundancy-information>

show chassis redundancy feb errors
  <get-feb-redundancy-error-information>

show chassis redundancy feb redundancy-group
  <get-feb-redundancy-group-information>

show chassis redundant-power-supply
  <get-rps-chassis-information>

show chassis routing-engine
  <get-route-engine-information>

show chassis routing-engine bios
  <get-bios-version-information>
show chassis scb
  <get-scb-information>

show chassis sfm
  <get-sfm-information>
```

```

show chassis sfm detail
show chassis sibs
    <get-sib-information>

show chassis spmb
    <get-spmb-information>

show chassis spmb sibs
    <get-spmb-sib-information>

show chassis ssb
    <get-ssb-information>

show chassis synchronization
    <get-clock-synchronization-information>

show chassis synchronization backup
show chassis synchronization master
show chassis temperature-thresholds
    <get-temperature-threshold-information>

show chassis vcpu
    <get-vcpu-information>

show class-of-service
    <get-cos-information>

show class-of-service adaptive-shaper
    <get-cos-adaptive-shaper-information>

show class-of-service classifier
    <get-cos-classifier-information>

show class-of-service code-point-aliases
    <get-cos-code-point-map-information>

show class-of-service congestion-notification
    <get-cos-congestion-notification-information>
show class-of-service drop-profile
    <get-cos-drop-profile-information>

show class-of-service fabric
show class-of-service fabric scheduler-map
    <get-cos-fabric-scheduler-map-information>

show class-of-service fabric statistics
    <get-fabric-queue-information>

show class-of-service forwarding-class
    <get-cos-forwarding-class-information>

show class-of-service forwarding-table
    <get-cos-table-information>

show class-of-service forwarding-table classifier
    <get-cos-classifier-table-information>

```

```
show class-of-service forwarding-table classifier mapping
  <get-cos-classifier-table-map-information>

show class-of-service forwarding-table drop-profile
  <get-cos-red-information>

show class-of-service forwarding-table fabric
show class-of-service forwarding-table fabric scheduler-map
  <get-cos-fwtab-fabric-scheduler-map-information>

show class-of-service forwarding-table forwarding-class-map
  <get-cos-forwarding-class-map-table-information>

show class-of-service forwarding-table forwarding-class-map mapping
  <get-cos-forwarding-class-map-interface-table-information>

show class-of-service forwarding-table loss-priority-map
  <get-cos-loss-priority-map-table-information>

show class-of-service forwarding-table loss-priority-map mapping
  <get-cos-loss-priority-map-table-binding-information>

show class-of-service forwarding-table policer
  <get-cos-policer-table-map-information>

show class-of-service forwarding-table rewrite-rule
  <get-cos-rewrite-table-information>

show class-of-service forwarding-table rewrite-rule mapping
  <get-cos-rewrite-table-map-information>

show class-of-service forwarding-table scheduler-map
  <get-cos-scheduler-map-table-information>

show class-of-service forwarding-table shaper
  <get-cos-shaper-table-map-information>

show class-of-service forwarding-table translation-table
  <get-cos-translation-table-information>

show class-of-service forwarding-table translation-table mapping
  <get-cos-translation-table-mapping-information>

show class-of-service fragmentation-map
  <get-cos-fragmentation-map-information>

show class-of-service interface
  <get-cos-interface-map-information>

show class-of-service interface-set
  <get-cos-interface-set-map-information>

show class-of-service l2tp-session
  <get-cos-l2tp-session-map-information>
```

```
show class-of-service loss-priority-map
  <get-cos-loss-priority-map-information>

show class-of-service multi-destination
  <get-cos-multi-destination-information>

show class-of-service rewrite-rule
  <get-cos-rewrite-information>

show class-of-service routing-instance
  <get-cos-routing-instance-map-information>

show class-of-service scheduler-map
  <get-cos-scheduler-map-information>

show class-of-service traffic-control-profile
  <get-cos-traffic-control-profile-information>

show class-of-service translation-table
  <get-cos-translation-table-map-information>

show class-of-service virtual-channel
  <get-cos-virtual-channel-information>

show class-of-service virtual-channel-group
  <get-cos-virtual-channel-group-information>

show cli
show cli authorization
  <get-authorization-information>

show cli directory
show cli history
show configuration
show connections
show database-replication
show database-replication statistics
  <get-database-replication-statistics-information>

show database-replication summary
  <get-database-replication-summary-information>

show dhcp
show dhcp relay
show dhcp relay binding
  <get-dhcp-relay-binding-information>

show dhcp relay binding interface
show dhcp relay statistics
  <get-dhcp-relay-statistics-information>

show dhcp server
show dhcp server binding
  <get-dhcp-server-binding-information>

show dhcp server binding interface
```



```
show dhcp server statistics
  <get-dhcp-server-statistics-information>

show dhcpv6
show dhcpv6 server
show dhcpv6 server binding
  <get-dhcpv6-server-binding-information>

show dhcpv6 server binding interface
show dhcpv6 server statistics
  <get-dhcpv6-server-statistics-information>

show diameter
  <get-diameter-information>

show diameter function
  <get-diameter-function-information>

show diameter function statistics
  <get-diameter-function-statistics>

show diameter instance
  <get-diameter-instance-information>

show diameter network-element
  <get-diameter-network-element-information>

show diameter network-element map
  <get-diameter-network-element-map-information>

show diameter peer
  <get-diameter-peer-information>

show diameter peer map
  <get-diameter-peer-map-information>

show diameter peer statistics
  <get-diameter-peer-statistics>

show diameter route
  <get-diameter-route-information>

show dot1x
show dot1x authentication-failed-users
  <get-dot1x-authentication-failed-users>

show dot1x interface
  <get-dot1x-interface-information>

show dot1x static-mac-address
  <get-dot1x-static-mac-addresses>

show dot1x static-mac-address interface
  <get-dot1x-interface-mac-addresses>

show dvmrp
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show dvmrp interfaces
  <get-dvmrp-interfaces-information>

show dvmrp neighbors
  <get-dvmrp-neighbors-information>

show dvmrp prefix
  <get-dvmrp-prefix-information>

show dvmrp prunes
  <get-dvmrp-prunes-information>

show dynamic-tunnels
show dynamic-tunnels database
show esis
show esis adjacency
  <get-esis-adjacency-information>

show esis interface
  <get-esis-interface-information>

show esis statistics
  <get-esis-statistics-information>

show event-options
show event-options event-scripts
show event-options event-scripts policies
  <get-event-summary>

show extension-provider
show extension-provider system
show extension-provider system connections
  <get-mspinfo-connections>

show extension-provider system packages
  <get-mspinfo-packages>

show extension-provider system processes
  <get-mspinfo-processes>

show extension-provider system processes brief
  <get-mspinfo-processes-brief>

show extension-provider system processes extensive
  <get-mspinfo-processes-extensive>

show extension-provider system uptime
  <get-mspinfo-uptime>

show extension-provider system virtual-memory
  <get-mspinfo-virtual-memory>

show forwarding-options
show forwarding-options next-hop-group
show forwarding-options port-mirroring

```

```
show helper
show helper statistics
  <get-helper-statistics-information>

show iccp
show igmp
show igmp group
  <get-igmp-group-information>

show igmp interface
  <get-igmp-interface-information>

show igmp output-group
  <get-igmp-output-group-information>

show igmp snooping
show igmp snooping interface
  <get-igmp-snooping-interface-information>

show igmp snooping interface bridge-domain
show igmp snooping membership
  <get-igmp-snooping-membership-information>

show igmp snooping membership bridge-domain
show igmp snooping statistics
  <get-igmp-snooping-statistics-information>

show igmp snooping statistics bridge-domain
show igmp statistics
  <get-igmp-statistics-information>

show ike
show ike security-associations
  <get-ike-security-associations-information>

show ilmi
show ilmi interface
show ilmi statistics
show ingress-replication
  <get-ingress-replication-information>
show interfaces
  <get-interface-information>

show interfaces controller
show interfaces destination-class
  <get-destination-class-statistics>

show interfaces destination-class all
show interfaces diagnostics
show interfaces diagnostics optics
  <get-interface-optics-diagnostics-information>

show interfaces far-end-interval
show interfaces filters
  <get-interface-filter-information>
```

```
show interfaces interface-set
show interfaces interface-set queue
  <get-interface-set-queue-information>

show interfaces interval
show interfaces mac-database
  <get-mac-database>

show interfaces mc-ae
show interfaces policers
  <get-interface-policer-information>

show interfaces queue
  <get-interface-queue-information>

show interfaces redundancy
show interfaces redundancy detail
show interfaces routing
show interfaces source-class
  <get-source-class-statistics>

show interfaces source-class all
show ipsec
show ipsec certificates
  <get-certificates-information>

show ipsec certificates crl
  <get-crl-information>

show ipsec redundancy
show ipsec redundancy interface
  <get-ipsec-pic-redundancy-information>

show ipsec redundancy security-associations
  <get-ipsec-tunnel-redundancy-information>

show ipsec security-associations
  <get-security-associations-information>

show ipv6
show ipv6 neighbors
  <get-ipv6-nd-information>

show ipv6 router-advertisement
  <get-ipv6-ra-information>

show isis
show isis adjacency
  <get-isis-adjacency-information>

show isis authentication
  <get-isis-authentication-information>

show isis backup
show isis backup coverage
  <get-isis-backup-coverage-information>
```

```
show isis backup label-switched-path
  <get-isis-backup-lsp-information>

show isis backup spf

show isis backup spf results
  <get-isis-backup-spf-results-information>

show isis context-identifier
  <get-isis-context-identifier-information>

show isis context-identifier identifier
  <get-isis-context-identifier-origin-information>
show isis database
  <get-isis-database-information>

show isis hostname
  <get-isis-hostname-information>

show isis interface
  <get-isis-interface-information>

show isis overview
  <get-isis-overview-information>

show isis route
  <get-isis-route-information>

show isis spf
show isis spf brief
  <get-isis-spf-results-brief-information>

show isis spf log
  <get-isis-spf-log-information>

show isis spf results
  <get-isis-spf-results-information>

show isis statistics
  <get-isis-statistics-information>

show l2-learning
show l2-learning backbone-instance
show l2-learning global-information
show l2-learning global-mac-count
show l2-learning instance
show l2-learning interface
show l2-learning mac-move-buffer
show l2-learning provider-instance
show l2-learning remote-backbone-edge-bridges

show l2circuit
show l2circuit connections
  <get-l2ckt-connection-information>
```

```
show l2cpd
show l2cpd task
show l2cpd task io
show l2cpd task memory
show l2cpd task replication
show l2vpn
show l2vpn connections
  <get-l2vpn-connection-information>

show lacp
show lacp interfaces
  <get-lacp-interface-information>

show lacp statistics
show lacp statistics interfaces
  <get-lacp-interface-statistics>

show ldp
show ldp database
  <get-ldp-database-information>

show ldp fec-filters
  <get-ldp-fec-filters-information>

show ldp interface
  <get-ldp-interface-information>

show ldp neighbor
  <get-ldp-neighbor-information>

show ldp oam
show ldp path
  <get-ldp-path-information>

show ldp route
  <get-ldp-route-information>

show ldp session
  <get-ldp-session-information>

show ldp statistics
  <get-ldp-statistics-information>

show ldp traffic-statistics
  <get-ldp-traffic-statistics-information>

show link-management
  <get-lm-information>

show link-management peer
  <get-lm-peer-information>

show link-management routing
  <get-lm-routing-information>

show link-management routing peer
```

```
<get-lm-routing-peer-information>

show link-management routing resource
  <get-lm-routing-resource-information>

show link-management routing te-link
  <get-lm-routing-te-link-information>

show lldp
  <get-lldp-information>

show lldp detail
  <get-lldp-information-detail>

show lldp local-information
  <get-lldp-local-info>

show lldp neighbors
  <get-lldp-neighbors-information>

show lldp neighbors interface
show lldp remote-global-statistics
  <get-lldp-remote-global-statistics>

show lldp statistics
  <get-lldp-statistics-information>

show lldp statistics interface
show link-management statistics
  <get-lm-statistics-information>

show link-management statistics peer
  <get-lm-peer-statistics>

show link-management te-link
  <get-lm-te-link-information>

show mac-rewrite
show mac-rewrite interface
show mld
show mld group
  <get-mld-group-information>

show mld interface
  <get-mld-interface-information>

show mld output-group
  <get-mld-output-group-information>

show mld statistics
  <get-mld-statistics-information>

show mobile-ip
show mobile-ip home-agent
show mobile-ip home-agent binding
  <get-mip-binding-information>
```

```
show mobile-ip home-agent binding ip-address
  <get-ip-mip-binding-information>

show mobile-ip home-agent binding nai
  <get-nai-mip-binding-information>

show mobile-ip home-agent binding summary
  <get-summary-mip-binding-information>

show mobile-ip home-agent interface
  <get-mip-ha-interface-information>

show mobile-ip home-agent overview
  <get-mip-ha-overview-information>

show mobile-ip home-agent traffic
  <get-mip-ha-traffic-information>

show mobile-ip home-agent virtual-network
  <get-mip-ha-virtual-network-information>

show mobile-ip tunnel
show mobile-ip wimax
show mobile-ip wimax release
  <get-mip-wimax-release-information>

show mpls
show mpls admin-groups
  <get-mpls-admin-group-information>

show mpls call-admission-control
  <get-mpls-call-admission-control-information>

show mpls context-identifier
  <get-mpls-context-identifier-information>

show network-access domain-map
show network-access domain-map statistics
  <get-domain-map-statistics>
show mpls cspf
  <get-mpls-cspf-information>

show mpls diffserv-te
  <get-mpls-diffserv-te-information>

show mpls interface
  <get-mpls-interface-information>

show mpls lsp
  <get-mpls-lsp-information>

show mpls lsp defaults
  <get-mpls-lsp-defaults-information>

show mpls path
```



```
<get-mpls-path-information>

show mpls static-lsp
  <get-mpls-static-lsp-information>
show mpls traceroute
show mpls traceroute database
show mpls traceroute database ldp
show msdp
show msdp source
  <get-msdp-source-information>

show msdp source-active
  <get-msdp-source-active-information>

show msdp statistics
  <get-msdp-statistics-information>

show multicast
show multicast backup-pe-groups
  <get-multicast-backup-pe-groups-information>

show multicast backup-pe-groups address
  <get-multicast-backup-pe-address-information>

show multicast backup-pe-groups group
show multicast flow-map
  <get-multicast-flow-maps-information>

show multicast interface
  <get-multicast-interface-information>

show multicast next-hops
  <get-multicast-next-hops-information>

show multicast pim-to-igmp-proxy
  <get-multicast-pim-to-igmp-proxy-information>

show multicast pim-to-mld-proxy
  <get-multicast-pim-to-mld-proxy-information>

show multicast route
  <get-multicast-route-information>

show multicast rpf
  <get-multicast-rpf-information>

show multicast scope
  <get-multicast-scope-information>

show multicast sessions
  <get-multicast-sessions-information>

show multicast snooping
show multicast snooping next-hops
  <get-multicast-snooping-next-hops-information>
```

```
show multicast snooping route
  <get-multicast-snooping-route-information>

show multicast statistics
  <get-multicast-statistics-information>

show multicast usage
  <get-multicast-usage-information>

show mvpn
show mvpn c-multicast
show mvpn instance
  <get-mvpn-instance-information>

show mvpn neighbor
show mvrp
  <get-mvrp-information>

show mvrp applicant-state
  <get-mvrp-applicant-information>

show mvrp dynamic-vlan-memberships
  <get-mvrp-dynamic-vlan-memberships>

show mvrp interface
  <get-mvrp-interface-information>

show mvrp registration-state
  <get-mvrp-registration-state>

show mvrp statistics
  <get-mvrp-interface-statistics>

show network-access
show network-access aaa
show network-access aaa statistics
  <get-aaa-module-statistics>

show network-access aaa statistics address-assignment
show network-access aaa statistics address-assignment client
show network-access aaa statistics address-assignment pool
show network-access aaa subscribers
  <get-aaa-subscriber-table>

show network-access aaa subscribers session-id

show network-access aaa subscribers statistics
  <get-aaa-subscriber-statistics>

show network-access address-assignment
show network-access address-assignment pool
  <get-address-assignment-pool-table>

show network-access requests
show network-access requests pending
  <get-authentication-pending-table>
```

```
show network-access requests statistics
  <get-authentication-statistics>

show network-access securid-node-secret-file
  <get-node-secret-file-table>

show ntp
show ntp associations
show ntp status
show oam
show oam ethernet
show oam ethernet connectivity-fault-management
show oam ethernet connectivity-fault-management delay-statistics
  <get-cfm-delay-statistics>

show oam ethernet connectivity-fault-management forwarding-state
show oam ethernet connectivity-fault-management forwarding-state instance
  <get-cfm-forwarding-state-instance-information>

show oam ethernet connectivity-fault-management forwarding-state interface
  <get-cfm-forwarding-state-interface-information>

show oam ethernet connectivity-fault-management interfaces
  <get-cfm-interfaces-information>

show oam ethernet connectivity-fault-management mep-database
  <get-cfm-mep-database>

show oam ethernet connectivity-fault-management mep-statistics
  <get-cfm-mep-statistics>

show oam ethernet connectivity-fault-management mip
  <get-cfm-mip-information>

show oam ethernet connectivity-fault-management path-database
  <get-cfm-linktrace-path-database>

show oam ethernet connectivity-fault-management policer
  <get-evc-information>

show oam ethernet link-fault-management
  <get-lfmd-information>

show oam ethernet lmi
  <get-elmi-information>

show oam ethernet lmi statistics
  <get-elmi-statistics>

show ospf
show ospf backup
show ospf backup coverage
  <get-ospf-backup-coverage-information>

show ospf backup lsp
```

```
<get-ospf-backup-lsp-information>

show ospf backup neighbor
  <get-ospf-backup-neighbor-information>

show ospf backup spf
  <get-ospf-backup-spf-information>

show ospf context-identifier
  <get-ospf-context-id-information>

show ospf database
  <get-ospf-database-information>

show ospf interface
  <get-ospf-interface-information>

show ospf io-statistics
  <get-ospf-io-statistics-information>

show ospf log
  <get-ospf-log-information>

show ospf neighbor
  <get-ospf-neighbor-information>

show ospf overview
  <get-ospf-overview-information>

show ospf route
  <get-ospf-route-information>

show ospf statistics
  <get-ospf-statistics-information>

show ospf3
show ospf3 backup
show ospf3 backup coverage
  <get-ospf3-backup-coverage-information>

show ospf3 backup lsp
  <get-ospf3-backup-lsp-information>

show ospf3 backup neighbor
  <get-ospf3-backup-neighbor-information>

show ospf3 backup spf
  <get-ospf3-backup-spf-information>

show ospf3 database
  <get-ospf3-database-information>

show ospf3 interface
  <get-ospf3-interface-information>

show ospf3 io-statistics
```

```
<get-ospf3-io-statistics-information>

show ospf3 log
  <get-ospf3-log-information>

show ospf3 neighbor
  <get-ospf3-neighbor-information>

show ospf3 overview
  <get-ospf3-overview-information>

show ospf3 route
  <get-ospf3-route-information>

show ospf3 statistics
  <get-ospf3-statistics-information>

show passive-monitoring
  <get-passive-monitoring-information>

show passive-monitoring error
  <get-passive-monitoring-error-information>

show passive-monitoring flow
  <get-passive-monitoring-flow-information>

show passive-monitoring memory
  <get-passive-monitoring-memory-information>

show passive-monitoring status
  <get-passive-monitoring-status-information>

show passive-monitoring usage
  <get-passive-monitoring-usage-information>

show pfe
show pfe cfeb
show pfe feb
show pfe fpc
show pfe fwdd
show pfe lcc
show pfe next-hop
show pfe pfem
show pfe pfem detail
show pfe pfem extensive
show pfe route
show pfe route inet6
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 [edit services mobile-ip home-agent enable-service]

**Related  
Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
- Specifying Access Privileges for Junos OS Configuration Mode Hierarchies on page 9

## view-configuration

---

Can view all configuration (not including secrets)

**Commands**      No associated CLI command

**Statements**      No associated CLI configuration statement

**Related  
Documentation**

- Access Privilege User Permissions Flag Overview on page 14
- Junos OS Access Privilege Levels Overview on page 3
- Configuring Access Privilege Levels on page 7
- Specifying Access Privileges for Junos OS Operational Mode Commands on page 7
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