# S Commands

This chapter describes the Cisco NX-OS system management commands that begin with the letter S, excluding the **show** commands.

# sampler

To define a sampler and enter the sampler configuration mode, use the **sampler** command. To remove the sampler definition, use the **no** form of this command.

**sampler** *name*

**no sampler** *name*

| Syntax Description | *name* | Name of the sampler. |
| --- | --- | --- |

**Defaults**   No samplers are defined.

**Command Modes**   Global configuration

**SupportedUserRoles**   network-admin
vdc-admin

**Command History**

| Release | Modification |
| --- | --- |
| 4.0(1) | This command was introduced. |

**Usage Guidelines**   NetFlow sampling means that M out of N packets are sampled. When a packet is sampled and there is a NetFlow cache miss, a NetFlow cache entry is created for this flow. The first packet timestamp is updated and the statistics for the first packet are initialized (for example, the bytes are set to the number of bytes in the packet and packet count is set to one). If there is a NetFlow cache hit when the packet is sampled, then the cache for this flow is updated. This includes adding the number of bytes in the packet to the byte counter and incrementing the packet count by one.

Once you enter the **sampler** *name* command, you enter the sampler configuration mode, and the prompt changes to the following:

```
switch(config-flow-sampler)#
```

Within the sampler configuration mode, the following keywords and arguments are available to configure the flow monitor:

- **description** *description*—Provides a description for this sampler; maximum of 63 characters.

- **exit**—Exits from the current configuration mode.

- **mode** *sample-num* **out-of** *packets*—Configures the sampler mode. The valid values are as follows:

  - *sample-num*—Number of samples per sampling. The range is from 1 to 64.

  - **out-of**—Specifies the samples per packet ratio.

  - *packets*—Number of packets in each sampling. The range is from 1 to 8192.

- **no**—Negates a command or sets its defaults.

This command does not require a license.

**Examples**    This example shows how to define a sampler and enter the sampler configuration mode:

```
switch(config)# sampler testsampler
switch(config-flow-sampler)#
```

This example shows how to configure the sampler mode:

```
switch(config)# sampler testsampler
switch(config-flow-sampler)# mode 24 out-of 1200
```

This example shows how to remove a sampler definition:

```
switch(config)# no sampler testsampler
switch(config-flow)#
```

**Related Commands**

| Command | Description |
|---|---|
| **flow exporter** | Creates a flow exporter. |
| **flow monitor** | Creates a flow monitor. |
| **flow record** | Creates a flow record. |

# save

To save the current configuration session to a file, use the **save** command.

**save** *location*

| Syntax Description | *location* | Location of the file. The location can be in bootflash:, slot0:, or volatile: The file name can be any alphanumeric string up to 63 characters. |
|---|---|---|

**Defaults**   None

**Command Modes**   Any command mode

**SupportedUserRoles**   network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**   This command does not require a license.

**Examples**   This example shows how to save a configuration session to a file in bootflash:

```
switch# configure session myACLs
switch(config-s)# save bootflash:sessions/myACLs
```

**Related Commands**

| Command | Description |
|---|---|
| **delete** | Deletes a file from a location. |

# scheduler

To create or schedule a Scheduler job, use the **scheduler** command. To remove a job or scheduled job, use the **no** form of this command.

> **scheduler** {**aaa-authentication** [**username** *username*] **password** [**0** | **7**] *password* | **job name** *job-name* | **logfile size** *filesize* | **schedule name** *schedule-name*}

> **no scheduler** {**aaa-authentication** [**username** *username*] **password** [**0** | **7**] *password* | **job name** *job-name* | **logfile size** *filesize* | **schedule name** *schedule-name*}

| Syntax Description | | |
|---|---|---|
| **aaa-authentication** | Begins an AAA authentication exchange with a remote user. |
| **password** | Indicates the remote user is entering a password for authentication. |
| **0** | Indicates the password is in clear text. |
| **7** | Indicates the password is encrypted. |
| *password* | The remote user's password. |
| **username** *username* | Indicates the remote user is entering a username, and specifies the username. |
| **logfile** | Specifies a logfile configuration. |
| **size** *filesize* | Specifies the size of the logfile. The range is 16 to 1024 KB. |
| **schedule** | Defines a schedule for a job. |
| **name** *schedule-name* | Specifies the name of the schedule. The maximum length of the name is 31 characters. |
| **job name** *job-name* | Places you into Job Configuration mode for the specified job name. The maximum length of the name is 31 characters. |

**Defaults**    None

**Command Modes**    Job configuration

**SupportedUserRoles**    network-admin
vdc-admin

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**    To use this command, the scheduler must already be enabled.

To enable the scheduler, use the **feature scheduler** command.

Remote users must authenticate with the device using the **scheduler aaa-authentication** command Before using this command to configure a maintenance job.

This command does not require a license.

**Note** The commands within a scheduler job must be entered in a single line separated by semicolons (;).

**Examples** This example shows how to create a Scheduler job that saves the running configuration to a file in bootflash and then copies the file from bootflash to a TFTP server. The file name is created using the current time stamp and switch name.

```
switch(config)# scheduler job name backup-cfg
switch(config-job)# cli var name timestamp $(TIMESTAMP);copy running-config
bootflash:/$(SWITCHNAME)-cfg.$(timestamp);copy bootflash:/$(SWITCHNAME)-cfg.$(timestamp)
tftp://1.2.3.4/ vrf management
switch(config-job)# end
switch(config)#
```

This example shows how to schedule a Scheduler job to run daily at 1:00 a.m.

```
switch(config)# scheduler schedule name daily
switch(config-schedule)# job name backup-cfg
switch(config-schedule)# time daily 1:00
switch(config-schedule)# end
switch(config)#
```

This example shows how to remove a Scheduler job.

```
switch# config t
switch(config)# no scheduler job name backup-cfg
```

This example shows how to remove a Scheduler job schedule.

```
switch# config t
switch(config)# no scheduler schedule name daily
```

This example shows how to specify the password for a remote user.

```
switch# config t
switch(config)# scheduler aaa-authentication password newpwd
```

This example shows how to specify a clear text password for a remote user.

```
switch# config t
switch(config)# scheduler aaa-authentication password 0 newpwd
```

This example shows how to specify an encrypted password for a remote user.

```
switch# config t
switch(config)# scheduler aaa-authentication password 7 newpwd2
```

This example shows how to specify a name and authentication password for a remote user.

```
switch# config t
switch(config)# scheduler aaa-authentication username admin1 password newpwd3
```

| Related Commands | Command | Description |
|---|---|---|
| | **feature scheduler** | Enables the scheduler. |
| | **show scheduler** | Displays scheduler information. |

# shut

To shut down an Ethernet switched port analyzer (SPAN) session, use the **shut** command. To enable a SPAN session, use the **no** form of this command.

**shut**

**no shut**

| | |
|---|---|
| **Syntax Description** | This command has no arguments or keywords. |

| | |
|---|---|
| **Defaults** | None |

| | |
|---|---|
| **Command Modes** | monitor-common configuration (config-monitor) |

| | |
|---|---|
| **SupportedUserRoles** | network-admin<br>vdc-admin |

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

| | |
|---|---|
| **Usage Guidelines** | This command does not require a license. |

**Examples**

This example shows how to shut down a SPAN session:

```
switch(config)# monitor session 1
switch(config-monitor)# shut
```

This example shows how to enable a SPAN session:

```
switch(config-monitor)# no shut
switch(config-monitor)#
```

**Related Commands**

| Command | Description |
|---|---|
| **monitor session** | Enters the monitor configuration mode. |
| **show monitor session** | Displays the virtual SPAN configuration. |

# snmp-server aaa-user cache-timeout

To configure the Simple Network Management Protocol (SNMP) time-out value for synchronized AAA users, use the **snmp-server aaa-user cache-timeout** command. To revert to default, use the **no** form of this command.

**snmp-server aaa-user cache-timeout** *seconds*]

**no snmp-server aaa-user cache-timeout** *seconds*]

| | |
|---|---|
| **Syntax Description** | *seconds*  Timeout value, in seconds. The range is from 1 to 86400. |

**Defaults**  3600 seconds.

**Command Modes**  Global configuration

**SupportedUserRoles**  network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(3) | This command was introduced. |

**Usage Guidelines**  This command does not require a license.

**Examples**  This example shows how to configure the AAA user synchronization timeout value:

```
switch# configure terminal
switch(config)# snmp-server aaa-user cache-timeout 6000
```

**Related Commands**

| Command | Description |
|---|---|
| **show snmp** | Displays information about SNMP. |

# snmp-server community

To configure the Simple Network Management Protocol (SNMP) community string, use the **snmp-server community** command. To remove the community string, use the **no** form of this command.

**snmp-server community** *name* [**group** *name* | **ro** | **rw**]

**no snmp-server community** *name* [**group** *name* | **ro** | **rw**]

**Syntax Description**

| | |
|---|---|
| *name* | SNMP community string. The name can be any alphanumeric string up to 32 characters. |
| **group** *name* | (Optional) Specifies the group name to which the community belongs. The name can be any alphanumeric string up to 32 characters. |
| **ro** | (Optional) Sets read-only access for this community. |
| **rw** | (Optional) Sets read-write access for this community. |

**Defaults**        The default community access is read-only (**ro**).

**Command Modes**        Global configuration

**SupportedUserRoles**        network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**        Use the **snmp-server community** command to configure read-only or read-write access to the SNMP agent on the device. You can optionally configure the community for an access group or user role. See the *Cisco NX-OS Security Configuration Guide, Release 4.0(1)* for more information on user roles.

This command does not require a license.

**Examples**        This example shows how to configure a read-only SNMP community:

```
switch# configure terminal
switch(config)# snmp-server community test ro
```

**Related Commands**

| Command | Description |
| --- | --- |
| **show snmp community** | Displays information about SNMP communities. |
| **show snmp group** | Displays information about configured user roles. |

# snmp-server contact

To configure the Simple Network Management Protocol (SNMP) contact information, use the **snmp-server contact** command. To remove the contact information, use the **no** form of this command.

**snmp-server contact** [*contact-info*]

**no snmp-server contact** [*contact-info*]

| Syntax Description | *contact-info* | (Optional) SNMP contact information (sysContact). The name can be any alphanumeric string up to 255 characters. |
|---|---|---|

**Defaults**   A zero-length string.

**Command Modes**   Global configuration

**SupportedUserRoles**   network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**   Use the **snmp-server contact** command to configure the SNMP sysContact variable.

This command does not require a license.

**Examples**   This example shows how to configure the SNMP contact:

```
switch# configure terminal
switch(config)# snmp-server contact Jane Smith@anyplace.com
```

**Related Commands**

| Command | Description |
|---|---|
| **show snmp** | Displays information about SNMP. |

# snmp-server context

To configure the Simple Network Management Protocol (SNMP) context to logical network entity mapping, use the **snmp-server context** command. To remove the context, use the **no** form of this command.

> **snmp-server context** *context-name* [**instance** *instance-name*] [**vrf** *vrf-name*] [**topology** *topology-name*]

> **no snmp-server context** *context-name* [**instance** *instance-name*] [**vrf** *vrf-name*] [**topology** *topology-name*]

**Syntax Description**

| | |
|---|---|
| *context-name* | SNMP context. The name can be any alphanumeric string up to 32 characters. |
| **instance** *instance-name* | (Optional) Specifies a protocol instance. The name can be any alphanumeric string up to 32 characters. |
| **vrf** *vrf-name* | (Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any alphanumeric string up to 32 characters. |
| **topology** *topology-name* | (Optional) Specifies the topology. The name can be any alphanumeric string up to 32 characters. |

**Defaults**        None

**Command Modes**        Global configuration

**SupportedUserRoles**        network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(2) | This command was introduced. |

**Usage Guidelines**        Use the **snmp-server context** command to map between SNMP contexts and logical network entities, such as protocol instances or VRFs.

Do not use the **instance**, **vrf**, or **topology** keywords to delete a context. If you use these keywords, you map the context to a zero-length string.

If you are using SNMPv2c, use the **snmp-server mib community-map** command to map an SNMPv2c community to an SNMP context and use the **snmp-server context** command to map this context to a logical network entity.

See the *Cisco NX-OS Security Configuration Guide* for more information on context mapping.

This command does not require a license.

**Examples**  This example shows how to map the public1 context to VRF red:

```
switch# configure terminal
switch(config)# snmp-server context public1 vrf red
```

**Related Commands**

| Command | Description |
| --- | --- |
| **show snmp context** | Displays information about SNMP contexts. |
| **snmp-server mib community-map** | Maps an SNMPv2c community to an SNMP context. |

# snmp-server enable traps

To enable the Simple Network Management Protocol (SNMP) notifications, use the **snmp-server enable traps** command. To disable SNMP notifications, use the **no** form of this command.

> **snmp-server enable traps** [**aaa** [**server-state-change**] | **bgp** | **bridge** [**topologychange**] [**newroot**] | **callhome** | **eigrp** | **entity** [**fru**] | **hsrp** [**state-change**] | **license** | **link** | **ospf** *instance-tag* [**lsa** | **rate-limit** *rate*] | **port-security** | **rf** | **snmp** [**authentication**] | **stp** [**inconsistency**] [**loop-consistency**] [**root-inconsistency**]]

> **no snmp-server enable traps** [**aaa** [**server-state-change**] | **bgp** | **bridge** [**topologychange**] [**newroot**] | **callhome** | **eigrp** | **entity** [**fru**] | **hsrp** [**state-change**] | **license** | **link** | **ospf** *instance-tag* [**lsa** | **rate-limit** *rate*] | **port-security** | **rf** | **snmp** [**authentication**] | **stp** [**inconsistency**] [**loop-consistency**] [**root-inconsistency**]]

| Syntax Description | | |
|---|---|---|
| **aaa** | (Optional) Enables AAA notifications. |
| **server-state-change** | (Optional) Enables the server-state-change AAA notification. |
| **bgp** | (Optional) Enables BGP notifications. |
| **bridge** | (Optional) Enables STP Bridge MIB notifications. |
| **topologychange** | (Optional) Enables STP topology change notifications. |
| **newroot** | (Optional) Enables STP new root bridge notifications. |
| **callhome** | (Optional) Enables Call Home notifications. |
| **eigrp** | (Optional) Enables EIGRP4-MIB notifications. |
| **entity** | (Optional) Enables ENTITY-MIB notifications. |
| **fru** | (Optional) Enables ENTITY-FRU-MIB notifications. |
| **hsrp** | (Optional) Enables CISCO-HSRP-MIB notifications. |
| **state-change** | (Optional) Enables the state-change HSRP notification. |
| **license** | (Optional) Enables license notifications. |
| **link** | (Optional) Enables IF-MIB link notifications. |
| **ospf** *instance-tag* | (Optional) Enables Open Shortest Path First (OSPF) notifications. |
| **lsa** | (Optional) Enables OSPF LSA notifications. |
| **rate-limit** *rate* | (Optional) Enables rate limits on OSPF notifications. The range is from 2 to 60 seconds. The default is 10 seconds. |
| **port-security** | (Optional) Enables port security notifications. |
| **rf** | (Optional) Enables redundancy framework (RF) SNMP notifications. |
| **snmp** | (Optional) Enables general SNMP notifications. |
| **authentication** | (Optional) Enables SNMP authentication notifications. |
| **stpx** | (Optional) Enables STPX MIB notifications. |
| **inconsistency** | (Optional) Enables SNMP STPX MIB InconsistencyUpdate notifications. |
| **loop-inconsistency** | (Optional) Enables SNMP STPX MIB (Optional) Enables SNMP STPX MIB InconsistencyUpdate notifications. |
| **root-inconsistency** | (Optional) Enables SNMP STPX MIB RooInconsistencyUpdate notifications. |

**Defaults**     License and SNMP authentication notifications are enabled.

**Command Modes**     Global configuration

**SupportedUserRoles**     network-admin
vdc-admin

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1) | This command was introduced. |
| 4.0(2) | Added OSPF **rate-limit** keyword. |
| 4.0(3) | Added **eigrp** keyword. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to enable BGP notifications:

```
switch# configure terminal
switch(config) snmp-server enable traps bgp
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **show snmp trap** | Displays the enable or disable state of all SNMP notifications. |

# snmp-server globalEnforcePriv

To globally enforce privacy for all Simple Network Management Protocol (SNMP) users, use the **snmp-server globalEnforcePriv** command in configuration mode. To disable global privacy, use the no form of this command.

**snmp-server globalEnforcePriv**

**no snmp-server globalEnforcePriv**

| | |
|---|---|
| **Syntax Description** | This command has no arguments or keywords. |

| | |
|---|---|
| **Defaults** | Disabled |

| | |
|---|---|
| **Command Modes** | Global configuration |

| | |
|---|---|
| **SupportedUserRoles** | network-admin<br>vdc-admin |

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**  Use the **snmp-server globalEnforcePriv** command to enforce privacy on all SNMP users.

This command does not require a license.

**Examples**  This example shows how to globally enforce privacy for all SNMP contact:

```
switch# configure terminal
switch(config)# snmp-server contact Jane Smith@anyplace.com
```

**Related Commands**

| Command | Description |
|---|---|
| **show snmp** | Displays information about SNMP. |

# snmp-server host

To specify the server host to receive Simple Network Management Protocol (SNMP) notifications, use the **snmp-server host** command. To remove the SNMP server configuration, use the **no** form of this command.

> **snmp-server host** *host-name* {*snmp-name* | **filter-vrf** {*vrf-name* | **default** | **management**} | **informs** {*snmp-name* | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} | **source-interface** {**ethernet** *number* | **loopback** *number* | **mgmt** *number* | **port-channel** *number* | **vlan** *number*} | **traps** {*snmp-name* | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} | **use-vrf** {*vrf-name* | **default** | **management**} | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} **udp-port** *port*

> **no snmp-server host** *host-name* {*snmp-name* | **filter-vrf** {*vrf-name* | **default** | **management**} | **informs** {*snmp-name* | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} | **source-interface** {**ethernet** *number* | **loopback** *number* | **mgmt** *number* | **port-channel** *number* | **vlan** *number*} | **traps** {*snmp-name* | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} | **use-vrf** {*vrf-name* | **default** | **management**} | **version** {**1** *snmp-name* | **2c** *snmp-name* | **3** {**auth** *snmp-name* | **noauth** *snmp-name* | **priv** *snmp-name*}}} **udp-port** *port*

**Syntax Description**

| | |
|---|---|
| *host-name* | IP4 or IPv6 address or name of the host. |
| *snmp-name* | SNMP community string or SNMPv3 username. The maximum number of alphanumeric characters can be 32. |
| **filter-vrf** | Specifies the virtual routing and forwarding (VRF) instance whose notifications are to be filtered. |
| *vrf-name* | Name of the VRF. The maximum number of alphanumeric characters can be 32. |
| **default** | Specifies the default VRF. |
| **management** | Specifies the management VRF. |
| **informs** | Sends SNMP information to this host. |
| **version** | Specifies the SNMP version used to send notifications. |
| **1** | Specifies SNMPv1. |
| **2c** | Specifies SNMPv2c. |
| **3** | Specifies SNMPv3. |
| **auth** | Specifies the SNMPv3 authNoPriv security level. |
| **noauth** | Specifies the SNMPv3 noAuthNoPriv security level. |
| **priv** | Specifies the SNMPv3 authPriv security level. |
| **source-interface** | Specifies the source interface used to send SNMP notifications to this host. |
| **ethernet** *number* | Specifies the Ethernet IEEE 802.3z slot number and port number in this format: 1/1. The range for the slot number is from 1 to 18, and the range for the port number is from 1 to 128. |
| **loopback** *number* | Specifies the virtual interface number. The range is from 0 to 1023. |
| **mgmt** *number* | Specifies the management interface number. The value is 0. |

| | |
|---|---|
| **port-channel** *number* | Specifies the port-channel number and the subinterface number in this format: 1.1. The range for the port-channel number is from 1 to 4096, and the range for the subinterface number is from 1 to 4093. |
| **vlan** *number* | Specifies the VLAN interface number. The range is from 1 to 4094. |
| **traps** | Sends SNMP traps to this host. |
| **use-vrf** | Specifies the name of the VRF on which notifications are to be sent. |
| **udp-port** *port* | Specifies the User Datagram Protocol (UDP) port number of the notification host. The range is from 0 to 65535. |

**Defaults**      None

**Command Modes**      Global configuration

**SupportedUserRoles**      network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.2(1) | This command was introduced. |

**Usage Guidelines**      The source-interface configuration overrides the global source-interface configuration.

This command does not require a license.

**Examples**      This example shows how to configure an SNMP server host:

```
switch(config)# snmp-server host 192.0.2.1 traps snmp1 udp-port 1
```

This example shows how to remove an SNMP server host:

```
switch(config)# no snmp-server host 192.0.2.1 traps snmp1 udp-port 1
switch(config)#
```

**Related Commands**

| Command | Description |
|---|---|
| **snmp-server community** | Configures the SNMP community string. |
| **snmp-server contact** | Configures the SNMP contact information. |

# snmp-server host filter-vrf

To configure a Simple Network Management Protocol (SNMP) host receiver to gather notifications that occur on a specific virtual routing and forwarding (VRF) instance, use the **snmp-server host filter-vrf** command. To remove the VRF filter, use the **no** form of this command.

**snmp-server host** *host-address* **filter-vrf** *vrf-name* [**udp-port** *port*]

**no snmp-server host** *host-address* **filter-vrf** *vrf-name* [**udp-port** *port*]

| Syntax Description | *host-address* | Specifies the name or IP address of the host (the targeted recipient). |
|---|---|---|
| | *vrf-name* | Name of the VRF. The name can be any alphanumeric string up to 63 characters. |
| | **udp-port** *port* | Specifies the port UDP port of the host to use. The range is from 0 to 65535. The default is 162. |

**Defaults**      None

**Command Modes**      Global configuration

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**      This command does not require a license.

**Examples**      The following example configures the host receiver to receive notifications from the red VRF.

```
switch# config terminal
switch(config)# snmp-server host 10.1.1.1 filter-vrf red
```

| Related Commands | Command | Description |
|---|---|---|
| | **show snmp** | Displays SNMP information. |
| | **snmp-server host** | Configures an SNMP host receiver. |
| | **snmp-server host use-vrf** | Configures Cisco NX-OS to send notifications on the specified VRF to communicate with an SNMP host receiver. |

# snmp-server host use-vrf

To configure the device to communicate with a Simple Network Management Protocol (SNMP) host receiver on a specific virtual routing and forwarding (VRF) instance, use the **snmp-server host use-vrf** command. To return to the default, use the **no** form of this command.

**snmp-server host** *host-address* **use-vrf** *vrf-name* [**udp-port** *port*]

**no snmp-server host** *host-address* **use-vrf** *vrf-name* [**udp-port** *port*]

**Syntax Description**

| | |
|---|---|
| *host-address* | Specifies the name or IP address of the host (the targeted recipient). |
| *vrf-name* | Name of the VRF. The name can be any alphanumeric string up to 63 characters. |
| **udp-port** *port* | Specifies the port UDP port of the host to use. The range is from 0 to 65535. The default is 162. |

**Defaults**     None

**Command Modes**     Global configuration

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     The following example configures Cisco NX-OS to communicate with the host receiver on the blue VRF.

```
switch# config terminal
switch(config)# snmp-server host 10.1.1.1 use-vrf blue
```

**Related Commands**

| Command | Description |
|---|---|
| **show snmp** | Displays SNMP information. |
| **snmp-server host** | Configures an SNMP host receiver. |
| **snmp-server host filter-vrf** | Sends only notifications on the specified VRF to the host receiver. |

# snmp-server location

To configure the device location used by the Simple Network Management Protocol (SNMP), use the **snmp-server location** command**.** To remove the location, use the no form of this command.

**snmp-server location** [*location*]

**no snmp-server location** [*location*]

| Syntax Description | *location* | (Optional) Specifies system location. The location can be any alphanumeric string up to 255 characters. |
|---|---|---|

**Defaults**    None

**Command Modes**    Global configuration

**SupportedUserRoles**    network-admin
vdc-admin

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to set the SNMP location:

```
switch# config terminal
switch(config)# snmp-server location SanJose
```

| Related Commands | Command | Description |
|---|---|---|
| | **show snmp** | Displays information about SNMP. |

# snmp-server mib community-map

To configure the Simple Network Management Protocol (SNMP) version 2c community to context mapping, use the **snmp-server mib community-map** command. To remove the community to context mapping, use the **no** form of this command.

**snmp-server mib community-map** *community-string* **context** *context-name*

**no snmp-server mib community-map** *community-string* **context** *context-name*

**Syntax Description**

| | |
|---|---|
| *community-string* | SNMP community string. The string can be any alphanumeric string up to 32 characters. |
| **context** *context-name* | Specifies the SNMP context. The name can be any alphanumeric string up to 32 characters. |

**Defaults**

None

**Command Modes**

Global configuration

**SupportedUserRoles**

network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(2) | This command was introduced. |

**Usage Guidelines**

Use the **snmp-server mib community-map** command to map between SNMPv2c communities and SNMP contexts. Use the **snmp-server context** command to map this context to a logical network entity.

See the *Cisco NX-OS Security Configuration Guide, Release 4.0(1)* for more information on context mapping.

This command does not require a license.

**Examples**

This example shows how to map the public community to the public1 context:

```
switch# configure terminal
switch(config)# snmp-server mib community-map public context public1
```

*Send document comments to nexus7k-docfeedback@cisco.com*

**Related Commands**

| Command | Description |
|---------|-------------|
| **show snmp community** | Displays information about SNMP communities. |
| **show snmp context** | Displays information about SNMP contexts. |
| **snmp-server context** | Maps an SNMP context to a logical network entity. |

# snmp-server protocol enable

To enable the Simple Network Management Protocol (SNMP), use the **snmp-server protocol enable** command. To disable the SNMP protocol, use the **no** form of this command.

**snmp-server protocol enable**

**no snmp-server protocol enable**

| | |
|---|---|
| **Syntax Description** | This command has no arguments or keywords. |

| | |
|---|---|
| **Defaults** | Enabled |

| | |
|---|---|
| **Command Modes** | Global configuration |

| | |
|---|---|
| **SupportedUserRoles** | network-admin<br>vdc-admin |

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(3)  | This command was introduced. |

**Usage Guidelines**

Use the **no snmp protocol enable** command to disable the SNMP protocol and close any TCP or UDP ports associated with the protocol.

This command does not require a license.

**Examples**

This example shows how disable the SNMP protocol:

```
switch# configure terminal
switch(config)# no snmp-server protocol enable
```

# snmp-server source-interface

To configure a Simple Network Management Protocol (SNMP) source interface through which notifications are sent, use the **snmp-server source-interface** command. To remove the SNMP source interface configuration, use the **no** form of this command.

> **snmp-server source-interface** {**traps** | **informs**} {**ethernet** *number* | **loopback** *number* | **mgmt** *number* | **port-channel** *number* | **vlan** *number*}

> **no snmp-server source-interface** {**traps** | **informs**} {**ethernet** *number* | **loopback** *number* | **mgmt** *number* | **port-channel** *number* | **vlan** *number*}

| Syntax Description | | |
|---|---|---|
| **traps** | Sends SNMP traps through the source interface. | |
| **informs** | Sends SNMP information through the source interface. | |
| **ethernet** *number* | Specifies the Ethernet IEEE 802.3z slot number and port number in this format: 1/1. The range for the slot number is from 1 to 18, and the range for the port number is from 1 to 128. | |
| **loopback** *number* | Specifies the virtual interface number. The range is from 0 to 1023. | |
| **mgmt** *number* | Specifies the management interface number. | |
| **port-channel** *number* | Specifies the port-channel number and the sub-interface number in this format: 1.1. The range for the port-channel number is from 1 to 4096, and the range for the sub-interface number is from 1 to 4093. | |
| **vlan** *number* | Specifies the VLAN interface number. The range is from 1 to 4094. | |

**Defaults**   None

**Command Modes**   Global configuration

**SupportedUserRoles**   network-admin
vdc-admin

| Command History | Release | Modification |
|---|---|---|
| | 4.2(1) | This command was introduced. |

**Usage Guidelines**   This command does not require a license.

**Examples**   This example shows how to configure an SNMP source interface:

```
switch(config)# snmp-server source-interface traps ethernet 1/1
```

This example shows how to remove the SNMP source interface:

```
switch(config)# no snmp-server source-interface traps ethernet 1/1
switch(config)#
```

| Related Commands | Command | Description |
|---|---|---|
| | **snmp-server community** | Configures the SNMP community string. |
| | **snmp-server host** | Configures a host receiver for SNMP notifications. |

# snmp-server tcp-session

To enable one-time authentication for Simple Network Management Protocol (SNMP) over a TCP session, use the **snmp-server tcp-session** command. To disable one-time authentication for SNMP over a TCP session, use the no form of this command.

**snmp-server tcp-session** [**auth**]

**no snmp-server tcp-session** [**auth**]

| Syntax Description | **auth** | Enables one-time authentication for SNMP over a TCP session. |
| --- | --- | --- |

**Defaults**  One-time authentication for SNMP over a TCP session is enabled.

**Command Modes**  Global configuration

**SupportedUserRoles**  network-admin
vdc-admin

| Command History | **Release** | **Modification** |
| --- | --- | --- |
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**  This command does not require a license.

**Examples**  This example enables one-time authentication for SNMP over a TCP session.

```
switch# config t
switch(config)# snmp-server tcp-session auth
```

| Related Commands | **Command** | **Description** |
| --- | --- | --- |
| | **show snmp** | Displays information about SNMP. |

# snmp-server user

To configure the Simple Network Management Protocol (SNMP) user information, use the **snmp-server user** command. To disable the configuration or to revert to factory defaults, use the no form of this command.

**snmp-server user** *username* [*group-name*] [**auth** {**md5** | **sha**} *password* [**priv** [**aes-128**] *password*] [**localizedkey**] [**engineID** *id*]

**no snmp-server user** *username* [*group-name*] [**auth** {**md5** | **sha**} *password* [**priv** [**aes-128**] *password*] [**localizedkey**] [**engineID** *id*]

| Syntax Description | | |
|---|---|
| | *username* | Name of user. The name can be any case-sensitive alphanumeric string up to 32 characters. |
| | *group-name* | (Optional) Name of group. The name can be any case-sensitive alphanumeric string up to 32 characters. |
| | **auth** | (Optional) Sets authentication parameters for the user. |
| | **md5** | Uses MD5 algorithm for authentication. |
| | **sha** | Uses SHA algorithm for authentication. |
| | *password* | User password. The password can be any case-sensitive alphanumeric string up to 64 characters. If you configure the **localizedkey** keyword, the password can be any case-sensitive alphanumeric string up to 130 characters |
| | **priv** | (Optional) Sets encryption parameters for the user. |
| | **aes-128** | (Optional) Sets 128-byte AES algorithm for privacy. |
| | **engineID** *id* | Configures the SNMP Engine ID for a notification target user. The engineID format is a 12-digit colon-separated decimal number. |
| | **localizedkey** | Sets passwords in localized key format. If you configure this keyword, the password can be any case-sensitive alphanumeric string up to 130 characters. |

**Defaults**      None

**Command Modes**      Global configuration

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**      Use the **snmp-server use**r command to configure user authentication and privacy settings for SNMP. If you use the **localizedkey** keyword, you cannot port the SNMP user configuration across devices as the user password contains information on the engine ID of the device. If you copy a configuration file into the device, the passwords may not be set correctly if the configuration file was generated at a different device. We recommend that you explicitly configure passwords after copying the configuration into the device.

SNMP Version 3 is the most secure model, as it allows packet encryption with the **priv** keyword.

To assign multiple roles to a user, configure multiple **snmp-server user** *username group-name* commands. The *group-name* argument is defined by the **role name** command.

If you are configuring an SNMP notification target user, use the **engineID** keyword to configure the SNMP engine ID for this user.

To delete the user or the role associated with that user, use the **no** form of this command.

**Note** You cannot delete the last role for a user.

This command does not require a license.

**Examples**

This example sets the user authentication information for user jane.

```
switch# config terminal
switch(config)# snmp-server user jane network-admin auth sha abcd1234
```

This example sets multiple roles for user sam.

```
switch# config terminal
switch(config)# snmp-server user sam network-admin
switch(config)# snmp-server user sam testrole
```

This example sets the user authentication and privacy information for user Juan.

```
switch# config terminal
switch(config)# snmp-server user Juan network-admin auth sha abcd1234 priv abcdefgh
```

This example sets the user authentication and SNMP engine ID for a notification target user.

```
switch# config terminal
switch(config)# snmp-server user notifUser network-admin auth sha abcd1234 engineID
00:12:00:00:09:03:00:05:48:00:74:30
```

**Related Commands**

| Command | Description |
|---|---|
| **role name** | Configures role profiles used as SNMP group names. |
| **show snmp** | Displays SNMP information. |
| **snmp-server host** | Configures SNMP server host information. |

# snmp-server user enforcePriv

To enforce privacy for an Simple Network Management Protocol (SNMP) user, use the **snmp-server user enforcePriv** command. To revert to factory defaults, use the no form of this command.

**snmp-server user** *username* **enforcePriv**

**no snmp-server user** *username* **enforcePriv**

**Syntax Description**

| | |
|---|---|
| *username* | Name of user. The name can be any case-sensitive alphanumeric string up to 32 characters. |

**Defaults**     None

**Command Modes**     Global configuration

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     The following example enforces privacy for the user joe.

```
switch# config terminal
switch(config)# snmp-server user joe enforcePriv
```

**Related Commands**

| Command | Description |
|---|---|
| **role name** | Configures role profiles used as SNMP group names. |
| **show snmp** | Displays SNMP information. |
| **snmp-server user** | Configures SNMP user information. |

# snmp-trap

To generate the Simple Network Management Protocol (SNMP) trap when an Embedded Event Manager (EEM) applet is triggered, use the **snmp-trap** command.

> **snmp-trap** [**intdata1** *integer-data1*] [**intdata2** *integer-data2*] [**strdata** *string-data*] **event-type** *ev_type* **policy-name** *name*

| Syntax Description | | |
|---|---|---|
| **intdata1** *integer-data1* | (Optional) Specifies an integer to be sent in the SNMP trap message to the SNMP agent. | |
| **intdata2** *integer-data2* | (Optional) Specifies a second integer to be sent in the SNMP trap message to the SNMP agent. | |
| **strdata** *string-data* | (Optional) Specifies a string to be sent in the SNMP trap message to the SNMP agent. If the string contains embedded blanks, enclose it in double quotation marks. | |
| **event-type** | Specifies the event type. | |
| *ev_type* | Event type. | |
| **policy-name** | Specifies the policy name. | |
| *name* | Policy name. | |

**Defaults**    None

**Command Modes**    Any command mode

**SupportedUserRoles**    network-admin
network-operator
vdc-admin
vdc-operator

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to generate an SNMP trap when an EEM applet is triggered:

```
switch(config)# event manager applet snmp-applet
switch(config-applet)# action 1 snmp-trap strdata "EEM detected server failure"
switch(config-applet)#
```

| Related Commands | Command | Description |
|---|---|---|
| | **syslog** | Configures a syslog message to generate when an Embedded Event Manager (EEM) applet is triggered. |

# source

To configure the NetFlow exporter interface to use to reach the NetFlow collector for the configured destination, use the **source** command. To remove the source, use the **no** form of this command.

**source** *if-type if-number*

**no source** [*if-type if-number*]

| Syntax Description | *if-type* | Interface type. For more information, use the question mark (?) online help function. |
| --- | --- | --- |
| | *if-number* | Interface or subinterface number. For more information about the numbering syntax for your networking device, use the question mark (?) online help function. |

**Defaults**  None

**Command Modes**  NetFlow exporter configuration (config-flow-exporter)

**SupportedUserRoles**  network-admin
vdc-admin

| Command History | Release | Modification |
| --- | --- | --- |
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**  This command does not require a license.

**Examples**  This example shows how to configure the NetFlow exporter source interface:

```
switch(config)# flow exporter Netflow-Exporter-1
switch(config-flow-exporter)# source Ethernet3/11
switch(config-flow-exporter)#
```

This example shows how to remove the Netflow exporter source interface configuration:

```
switch(config-flow-exporter)# no source Ethernet3/11
switch(config-flow-exporter)#
```

| Related Commands | Command | Description |
| --- | --- | --- |
| | **show flow exporter** | Displays information about NetFlow exporters. |

# source

To configure sources and the traffic direction in which to copy packets, use the **source** command. To remove sources, use the **no** form of this command.

**source** {**interface** *interface_range* | **vlan** *vlan_range*} [*src_dir*]

**no source** {**interface** *interface_range* | **vlan** *vlan_range*} [*src_dir*]

**Syntax Description**

| | |
|---|---|
| **interface** *interface_range* | Specifies interfaces. The range is from 1 to 128. |
| **vlan** *vlan_range* | Specifies the VLAN type. The VLAN range is from 1 to 3967 and 4048 to 4093. |
| *src_dir* | (Optional) Source direction. The traffic direction to copy as ingress (tx), egress (tx), or both. By default, the direction is both. |

**Defaults**       None

**Command Modes**       config-tx-only-monitor configuration (config- monitor)

**SupportedUserRoles**       network-admin
vdc-admin

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**

- This command does not require a license.

- You can configure one or more sources, as either a series of comma-separated entries, or a range of numbers. You can specify up to 128 interfaces.

- The traffic direction to copy as ingress (tx), egress (tx), or both. By default, the direction is both.

**Examples**       This example shows how to configure sources and the traffic direction in which to copy packets:

```
switch(config)# monitor session 1
switch(config-monitor)# source vlan 3, 6-10 tx
switch(config-monitor)#
```

This example shows how to remove a source configuration:

```
switch(config-monitor)# no source vlan 3, 6-10 tx
switch(config-monitor)#
```

**Related Commands**

| Command | Description |
|---|---|
| **show monitor session** | Displays the virtual SPAN configuration. |
| **copy running-config startup-config** | Copies the running configuration to the startup configuration. |

# switchport monitor

To configure the switchport interface as a SPAN destination, use the **switchport monitor** command. To disable the configuration, use the no form of this command.

**switchport monitor [ingress [learning]]**

**no switchport monitor [ingress [learning]]**

**Syntax Description**

| ingress | (Optional) Allows the SPAN destination port to inject packets that disrupt a certain TCP packet stream, for example, in networks with IDS. |
|---|---|
| learning | (Optional) Allows the SPAN destination port to inject packets, and allows the learning of MAC addresses, for example, the IDS MAC address. |

**Defaults**  None

**Command Modes**  Interface configuration

**Command History**

| Release | Modification |
|---|---|
| 4.1(2) | This command was introduced. |

**Usage Guidelines**  This command does not require a license.

**Examples**  This example configures the Ethernet interface 7/2 as a SPAN destination.

```
switch# config t
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config)# interface eth 7/2
switch(config-if)# switchport monitor
switch(config-if)#
```

This example configures the Ethernet interface 7/2 as a SPAN destination and allows it to inject packets and learn MAC addresses:

```
switch# config t
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config)# interface eth 7/2
switch(config-if)# switchport monitor ingress learning
switch(config-if)#
```

This example disables the SPAN destination on Ethernet interface 7/2:

```
switch# config t
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config)# interface eth 7/2
switch(config-if)# no switchport monitor
switch(config-if)#
```

**Related Commands**

| Command | Description |
| --- | --- |
| **monitor session** | Enters the Monitor Configuration mode for configuring a SPAN session. |
| **show monitor session** | Displays the SPAN session configuration. |

# system cores

To configure the destination for the system core, use the **system cores** command. To revert to the default, use the **no** form of this command.

**system cores** {**slot0:**[*path*] | **tftp:**/*server*/[*path*/]}*filename*

**no system cores**

## Syntax Description

| | |
|---|---|
| **slot0:** | Specifies the slot0: external file system. |
| *path*/ | (Optional) Directory path to the file. The directory names in the path are case sensitive. |
| **tftp:** | Specifies a TFTP server. |
| /*server*/ | Name or IPv4 address of TFTP server. The server name is case sensitive. |
| *filename* | Name for the core file. The name is alphanumeric, case sensitive, and has a maximum of 32 characters. |

## Defaults

None

## Command Modes

Global configuration

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

## Usage Guidelines

This command does not require a license.

## Examples

This example shows how to configure a core file:

```
switch# configure terminal
switch(config)# system cores slot0:core_file
```

This example shows how to disable system core logging:

```
switch# configure terminal
switch(config)# no system cores
```

**Related Commands**

| Command | Description |
|---|---|
| **clear system cores** | Clears the core file. |
| **show system cores** | Displays the core filename. |

# system hap-reset

To enable the Supervisor Reset HA policy, use the **system hap-reset** command.

**system hap-reset**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to enable the Supervisor Reset HA policy:

```
switch(config)# system hap-reset
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **show system standby manual-boot** | Displays the status of the system standby manual boot option. |

# system heartbeat

To enable heartbeat checks (default) and revert to the factory default, use the **system heartbeat** command.

**system heartbeat**

**Syntax Description**    This command has no arguments or keywords.

**Defaults**    None

**Command Modes**    Any command mode

**SupportedUserRoles**    network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to enable the heartbeat checks (default) and revert to the factory default:

```
switch(config)# system heartbeat
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system no hap-reset** | Disables the heartbeat checks (default) and reverts to the factory default. |

# system no hap-reset

To disable the Supervisor Reset HA policy, use the **system no hap-reset** command.

**system no hap-reset**

**Syntax Description**    This command has no arguments or keywords.

**Defaults**    None

**Command Modes**    Any command mode

**SupportedUserRoles**    network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to disable the Supervisor Reset HA policy:

```
switch(config)# system no hap-reset
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system hap-reset** | Enables the Supervisor Reset HA policy. |

# system no heartbeat

To disable the heartbeat checking (default) and revert to the factory default, use the **system no heartbeat** command.

**system no heartbeat**

**Syntax Description**   This command has no arguments or keywords.

**Defaults**   None

**Command Modes**   Any command mode

**SupportedUserRoles**   network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**   This command does not require a license.

**Examples**   This example shows how to disable the heartbeat checks (default) and revert to the factory default:

```
switch(config)# system no heartbeat
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system heartbeat** | Enables the heartbeat checks (default) and reverts to the factory default. |

# system no standby manual-boot

To disable the system standby manual boot option, use the **system no standby manual-boot** command.

**system no standby manual-boot**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to disable the system standby manual boot option:

```
switch(config)# system no standby manual-boot
system standby manual-boot option disabled
switch(config)#
```

**Related Commands**

| Command | Description |
|---|---|
| **show system standby manual-boot** | Displays the status of the system standby manual boot option. |

# system no watchdog

To disable the watchdog feature, use the **system no watchdog** command.

**system no watchdog**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to disable the watchdog feature:

```
switch(config)# system no watchdog
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system no watchdog kgdb** | Prevents the system from entering the Linux KGDB debugger on a watchdog failure. |

# system no watchdog kgdb

To prevent the system from entering the Linux KGDB debugger on a watchdog failure, use the **system no watchdog kgdb** command.

> **system no watchdog kgdb**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to prevent the system from entering the Linux KGDB debugger on a watchdog failure:

```
switch(config)# system no watchdog kgdb
switch(config)#
```

**Related Commands**

| Command | Description |
|---|---|
| **system no watchdog** | Disables the watchdog feature. |

# system pss shrink

To shrink Persistent Storage Service (PSS) files on the system, use the **system pss shrink** command.

**system pss shrink**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to shrink PSS files on the system:

```
switch(config)# system pss shrink
pss shrink completed
switch(config)
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **show system pss shrink status** | Displays the last PSS shrink status. |

# system standby manual-boot

To display the standby manual-boot status, use the **system standby manual-boot** command.

**system standby manual-boot**

**Syntax Description**    This command has no arguments or keywords.

**Defaults**    None

**Command Modes**    Any command mode

**SupportedUserRoles**
network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to display the standby manual-boot status:

```
switch(config)# system standby manual-boot
system standby manual-boot option enabled
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system startup-config init** | Initializes the startup configuration. |

# system startup-config init

To initialize the startup configuration, use the **system startup-config init** command.

**system startup-config init**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|-------------------------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to initialize the startup-configuration:

```
switch(config)# system startup-config init
WARNING: This command is going to re-initialize the contents of the startup-conf
iguration.
Do you want to continue? (y/n)  [y]
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system startup-config unlock** | Releases the system startup-configuration lock. |

# system startup-config unlock

To release a system startup-configuration lock, use the **system startup-config unlock** command.

**system startup-config unlock** *luck-id*

| Syntax Description | *luck-id* | Startup-configuration lock ID. The range is from 0 to 65536. |
|---|---|---|

**Defaults**       None

**Command Modes**       Any command mode

**SupportedUserRoles**       network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**       This command does not require a license.

**Examples**       This example shows how to release a system startup-configuration lock:

```
switch(config)# system startup-config unlock
switch(config)#
```

**Related Commands**

| Command | Description |
|---|---|
| **system startup-config init** | Initializes the startup-configuration. |

# system test-preupgrade running-ver

To test the running software version before an upgrade, use the **system test-preupgrade running-ver** command.

**system test-preupgrade running-ver** *version-number* **target-ver** *target-number* **swid** *id* **impact** *impact-number*

| Syntax Description | | |
|---|---|---|
| | *version-number* | Software version number currently running on the system. |
| | **target-ver** | Specifies the target version of the software. |
| | *target-number* | Target version. |
| | **swid** | Specifies the software ID of the image running on a module: system or kickstart. |
| | *id* | Software ID. |
| | **impact** | Specifies the impact: 0 for hitless and 1 for hitful. |
| | *impact-number* | Impact number. |

**Defaults**

None

**Command Modes**

Any command mode

**SupportedUserRoles**

network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---|---|
| 4.0(1) | This command was introduced. |

**Usage Guidelines**

This command does not require a license.

**Examples**

This example shows how to test the running software version before an upgrade:

```
switch(config)# system test-preupgrade running-ver 4.2<0.202> target-ver Update
swid 4.2.1 impact 0
System will be upgraded according to following table:
Module      Swid       Impact      Running-Version        New-Version   Upg-Required
------   ----------   ----------   --------------------   --------------------   ------------
     6     4.2.1      hitless        4.2<0.202>              Update
     1
     9     4.2.1      hitless        4.2<0.202>              Update
     1
    11     4.2.1      hitless        4.2<0.202>              Update
```

```
        1


Final upgrade impact table:
Module      Impact
------  ----------
     6     hitless
     9     hitless
    11     hitless


Message from services:
switch(config)#
```

| Related Commands | Command | Description |
|---|---|---|
| | **system startup-config unlock** | Releases a system startup-configuration lock. |
| | **system startup-config init** | Initializes the startup configuration. |

# system switchover

To switch over to the standby supervisor, use the **system switchover** command.

**system switchover**

**Syntax Description**     This command has no arguments or keywords.

**Defaults**     None

**Command Modes**     Any command mode

**SupportedUserRoles**     network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**     This command does not require a license.

**Examples**     This example shows how to switch over to the standby supervisor:

```
switch# system switchover
switch#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **show system redundancy** | Displays the system redundancy status. |

# system trace

To configure a system trace level, use the **system trace** command. To remove the system trace level configuration, use the **no** form of this command.

**system trace** *bit-mask*

**no system trace** [*bit-mask*]

| Syntax Description | *bit-mask* | Bit mask to use to change the trace level of the system. |
|---|---|---|

**Defaults**  None

**Command Modes**  Global configuration (config)

**SupportedUserRoles**  network-admin
vdc-admin

| Command History | Release | Modification |
|---|---|---|
| | 4.0(1) | This command was introduced. |

**Usage Guidelines**  This command does not require a license.

**Examples**  This example shows how to configure a system trace level:

```
switch(config)# system trace
switch(config)#
```

This example shows how to remove the system trace level configuration:

```
switch(config)# system no trace
switch(config)#
```

| Related Commands | Command | Description |
|---|---|---|
| | **show cores** | Displays the system core files. |

# system watchdog

To enable watchdog checks, use the **system watchdog** command.

**system watchdog**

**Syntax Description**    This command has no arguments or keywords.

**Defaults**    None

**Command Modes**    Any command mode

**SupportedUserRoles**    network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
|---------|--------------|
| 4.0(1)  | This command was introduced. |

**Usage Guidelines**    This command does not require a license.

**Examples**    This example shows how to enable watchdog checks:

```
switch(config)# system watchdog
switch(config)#
```

**Related Commands**

| Command | Description |
|---------|-------------|
| **system no watchdog** | Disables the watchdog feature. |
| **system no watchdog kgdb** | Prevents the system from entering the Linux KGDB debugger on a watchdog failure. |

# system watchdog kgdb

To configure the system to enter the Linux KGDB debugger on a watchdog failure, use the **system watchdog kgdb** command.

**system watchdog kgdb**

**Syntax Description**   This command has no arguments or keywords.

**Defaults**   None

**Command Modes**   Any command mode

**SupportedUserRoles**   network-admin
network-operator
vdc-admin
vdc-operator

**Command History**

| Release | Modification |
| --- | --- |
| 4.0(1) | This command was introduced. |

**Usage Guidelines**   This command does not require a license.

**Examples**   This example shows how to configure the system to enter the Linux KGDB debugger on a watchdog failure:

```
switch(config)# system watchdog kgdb
switch(config)#
```

**Related Commands**

| Command | Description |
| --- | --- |
| **system watchdog** | Enables the watchdog feature. |
| **system no watchdog** | Disables the watchdog feature. |

system watchdog kgdb