C Commands

This chapter describes the Cisco NX-OS system management commands that begin with the letter C.

callhome

To enter the CLI Call home configuration mode, use the **callhome** command.

callhome

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command Modes

Global configuration mode

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 enter the Call home configuration mode:

```
switch(config)# callhome
switch(config-callhome)#
```

Related Commands

snmp-server contact	Specifies or modifies the snmp-server contact name for Call home.
email-contact	Specifies the e-mail address of the person responsible for the device.
phone-contact	Specifies the phone number of the person responsible for the device.
streetaddress	Specifies the street address of the person responsible for the device.
contract-id	Specifies the service agreement contract number for this device.
customer-id	Specifies the service agreement customer number for this device.
site-id	Specifies the site ID number for this device.
switch-priority	Specifies the priority number for this device.
destination-profile	Creates and configures a Call home destination profile.
enable	Enables Call home. By default, Call home is disabled.
callhome test	Sends a test message to all configured destinations.

callhome send	Sends the specified Call home test message to all configured destinations.
show callhome	Displays the Call home configuration.

callhome send

To send a Call home message to all configured destinations, use the **callhome send** command.

callhome send [**configuration | diagnostic**]

Syntax Description

configuration	(Optional) Sends a configuration message.
diagnostic	(Optional) Sends a diagnostic message.

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 send a Call home configuration message:

```
switch(config)# callhome send configuration
trying to send configuration callhome message
switch(config)#
```

Related Commands

Command	Description
callhome	Enters the Call home configuration mode.
callhome test	Sends a test message to all configured Call home destinations.
show callhome	Displays the Call home configuration.

callhome test

To send a test message to all configured Call home destinations, use the **callhome test** command.

callhome test {**inventory**}

Syntax Description		
	inventory	Sends a dummy callhome inventory to all configured Call home destinations.

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 send a Call home test message:

```
switch(config)# callhome test
trying to send test callhome message
switch(config)#
```

Related Commands

Command	Description
callhome	Enters the Call home configuration mode.
callhome send	Sends a configuration or diagnostic message to all configured Call home destinations.
show callhome	Displays the Call home configuration.

cdp advertise

To configure the Cisco Discovery Protocol (CDP) version supported by the device, use the **cdp advertise** command. To remove the CDP configuration, use the **no** form of this command.

cdp advertise {**v1** | **v2**}

no cdp advertise [**v1** | **v2**]

Syntax Description

v1	Specifies CDP Version 1.
v2	Specifies CDP Version 2.

Defaults

None

Command Modes

Global configuration mode (config)
if-ethernet-all configuration (config-if-ethernet-all)
if-gig-ether configuration (config-if-gig-ether)
if-eth-base (config-if-eth-base)
if-mgmt-ether (config-if-mgmt-ether)

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 CDP version:

```
switch(config)# cdp advertise v2
switch(config)
```

This example shows how to remove the CDP configuration:

```
switch(config)# no cdp advertise v2
switch(config)
```

Related Commands

Command	Description
cdp enable	Enables CDP on an interface.

cdp enable

To enable Cisco Discovery Protocol (CDP) on an interface, use the **cdp enable** command. To disable CDP, use the **no** form of this command.

cdp enable

no cdp enable

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Global configuration mode (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 enable CDP on an interface:

```
switch(config)# cdp enable
switch(config)#
```

This example shows how to disable CDP on an interface:

```
switch(config)# no cdp enable
```

Related Commands

Command	Description
cdp advertise	Configures the CDP version supported by the device.

cdp format device-id

To configure a device ID format for Cisco Discovery Protocol (CDP), use the **cdp format device-id** command. To remove the device ID format, use the **no** form of this command.

cdp format device-id {**mac-address** | **serial-number** | **system-name**}

no cdp format device-id {**mac-address** | **serial-number** | **system-name**}

Syntax Description

mac-address	Specifies the MAC-address of the chassis.
serial-number	Specifies the chassis serial number or Organizationally Unique Identifier (OUI).
system-name	Specifies the system name. The default is fully qualified domain name.

Defaults

None

Command Modes

Global configuration mode (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 device ID format for CDP:

```
switch(config)# cdp format device-id mac-address
switch(config)#
```

This example shows how to remove the device ID format:

```
switch(config)# no cdp format device-id mac-address
switch(config)#
```

Related Commands

Command	Description
cdp enable	Configures a device ID format for CDP.

cdp holdtime

To configure the time that Cisco Discovery Protocol (CDP) holds onto neighbor information before refreshing it, use the **cdp holdtime** command. To remove the CDP hold time, use the **no** form of this command.

cdp holdtime *seconds*

no cdp holdtime *seconds*

Syntax Description

seconds	Hold time in seconds. The range is from 10 to 255.

Defaults

None

Command Modes

Global configuration mode (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 time that CDP holds onto neighbor information:

```
switch(config)# cdp holdtime 30
switch(config)#
```

This example shows how to remove the CDP hold time:

```
switch(config)# no cdp holdtime 30
switch(config)#
```

Related Commands

Command	Description
cdp timer	Configures the CDP refresh time interval.

cdp timer

To configure the Cisco Discovery Protocol (CDP) refresh time interval, use the **cdp timer** command. To remove the CDP refresh time interval configuration, use the **no** form of this command.

cdp timer *seconds*

no cdp timer *seconds*

Syntax Description

seconds	Time interval in seconds. The range is from 5 to 254.

Defaults

None

Command Modes

Global configuration mode (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 the CDP refresh time interval:

```
switch(config)# cdp timer 45
switch(config)#
```

This example shows how to remove the CDP refresh time interval:

```
switch(config)# no cdp timer 45
switch(config)#
```

Related Commands

Command	Description
cdp holdtime	Configures the time that CDP holds onto neighbor information before refreshing it.

cfs distribute

To globally enable Cisco Fabric Services (CFS) distribution for the device, use the **cfs distribute** command. To disable CFS distribution, use the **no** form of this command. To remove the CFS configuration, use the **no** form of this command.

cfs distribute

no cfs distribute

Syntax Description

This command has no arguments or keywords.

Defaults

Enabled

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

In order to distribute configuration information, CFS distribution must be enabled for both the device and the application.

CFS is enabled by default for the device. All devices in the fabric must have CFS enabled or they do not receive distributions.

If CFS distribution is disabled for an application, that application does not distribute any configuration and it does not accept a distribution from other devices in the fabric.

Examples

This example shows how to enable CFS distribution:

```
switch(config)# cfs distribute
```

Related Commands

show cfs status	Displays the CFS distribution status.
role distribute	Enables CFS to distribute role configurations.
show *application_name* **status**	Displays the status of the specified application, including whether CFS distribution is enabled for the application.
cfs region	Specifies a region for limiting the CFS distribution scope.

cfs eth

To globally configure the device to use Ethernet to distribute changes for all Cisco Fabric Services (CFS)-enabled applications, use the **cfs eth** command. To remove the CFS configuration, use the **no** form of this command.

cfs eth {**distribute**}

no cfs eth distribute

Syntax Description

distribute	Enables CFS distribution over Ethernet.

Defaults

None

Command Modes

Global configuration mode (config)

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure the device to use Ethernet to distribute changes for all CFS-enabled applications:

```
switch(config)# cfs eth distribute
switch(config)#
```

This example shows how to remove the CFS configuration:

```
switch(config)# no cfs eth distribute
This will prevent CFS from distributing over Ethernet network.
Are you sure? (y/n) n
switch(config)#
```

Related Commands

Command	Description
cfs distribute	Globally enables CFS distribution for the device.
show cfs status	Displays the CFS distribution status.

cfs ipv4

To globally configure the device to use IPv4 to distribute changes for all Cisco Fabric Services (CFS)-enabled applications, use the **cfs ipv4** command. To remove the CFS configuration, use the **no** form of this command.

cfs ipv4 [**mcast** | **distribute**]

no cfs ipv4 [**mcast** | **distribute**]

Syntax Description

mcast	(Optional) Configures the IPv4 multicast address over which configuration changes are distributed.
distribute	(Optional) Configures the device to use IPv4 to distribute changes in CFS-enabled applications.

Defaults

The default IPv4 multicast address is 239.255.70.83.

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

CFS cannot distribute over both IPv4 and IPv6 from the same device.

In order to distribute configuration information, CFS distribution must be enabled for both the device and the application.

CFS is enabled by default for the device. All devices in the fabric must have CFS enabled or they do not receive distributions.

If CFS distribution is disabled for an application, that application does not distribute any configuration and it does not accept a distribution from other devices in the fabric.

CFS over IP must be disabled before you can change the multicast address.

Examples

This example shows how to first disable CFS distribution over IPv4 and then configure the IPv4 multicast address over which configuration changes are distributed:

```
switch(config)# no cfs ipv4 distribute
This will prevent CFS from distributing over IPv4 network.
```

```
Are you sure? (y/n) [n] y

switch(config)# cfs ipv4 mcast-address 239.255.1.1

Distribution over this IP type will be affected

Change multicast address for CFS-IP ?

Are you sure? (y/n) [n] y
```

Related Commands

cfs distribute	Globally enables CFS distribution for the device.
cfs	Specifies a CFS distribution mode.
show cfs status	Displays the CFS distribution status.
application_name **distribute**	Enables distribution for the specified application, such as RADIUS.
show *application_name* **status**	Displays the status of the specified application, such as RADIUS, including whether CFS distribution is enabled for the application.

cfs region

To create a Cisco Fabric Services (CFS) region that limits the distribution scope of an application, use the **cfs region** command. To remove the region or the application, use the **no** form of this command.

cfs region *region_id*

application_name

no cfs region

no *application_name*

Syntax Description

region_id	CFS region that is identified by numbers 0 through 200. Region 0 is the default region and it contains every device in the fabric that is not assigned to another region. You can configure region number 1 through 200.
application_name	Application that you assign to the specified region for CFS distribution.

Defaults

The default region ID is 0.

Command Modes

Global configuration mode

CFS region configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

If a feature is moved, that is, assigned to a new region, its scope is restricted to that region; it ignores all other regions for distribution or merging purposes.

You can set up a CFS region to distribute configurations for multiple applications. However, on a given device, only one CFS region at a time can distribute the configuration for a given application.

Once you assign an application to a CFS region, its configuration cannot be distributed within another CFS region.

If you remove an application from a region, and do not assign it into a different region, it is added to the default region, region 0.

If you attempt to add an application to the same region more than once, the following message appears:

```
Application already present in the same region.
```

In order to distribute configuration information, CFS distribution must be enabled for both the device and the application.

CFS is enabled by default for the device. All devices in the fabric must have CFS enabled or they do not receive distributions.

If CFS distribution is disabled for an application, then that application does not distribute any configuration and it does not accept a distribution from other devices in the fabric.

This command does not require a license.

Examples

This example shows how to create region 4 and add the NTP application to it. When you create a region, the CLI places you into region configuration mode for that region, where you can then add an application.

```
switch(config)# cfs region 4
switch(config-cfs-region)# callhome
switch(config-cfs-region)# show cfs region brief

--------------------------------------
 Region         Application   Enabled
--------------------------------------
   4            ntp           no
   4            callhome      no
   6            igmp          yes
   6            radius        no

switch(config-cfs-region)#
```

Related Commands

show cfs region	Displays the CFS distribution region(s) configured for the device.
show cfs status	Displays the CFS distribution status.
application_name **distribute**	Enables distribution for the specified application, such as NTP.
show *application_name* **status**	Displays the status of the specified application, such as NTP, including whether CFS distribution is enabled for the application.

check logflash

To check the compactFlash, use the **check logflash** command.

check logflash [**bad-blocks**]

Syntax Description

bad-blocks	(Optional) Finds bad blocks in compactFlash.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

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

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 check compactFlash:

```
switch# check logflash
```

checkpoint

To configure the rollback checkpoint, use the **checkpoint** command. To delete the checkpoint, use the **no** form of this command.

checkpoint {*name* | **description** *description* | **file** *name*}

no checkpoint *name*

Syntax Description

name	(Optional) Checkpoint name used in the checkpoint database. The name can be any alphanumeric string up to 80 characters but cannot contain spaces.
description *description*	(Optional) Specifies the checkpoint description for the given checkpoint. The description can contain up to 80 alphanumeric characters, including spaces.
file *name*	(Optional) Specifies the filename used to save the checkpoint.

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

If you use the **checkpoint** command without a name, Cisco NX-OS creates the file with the name auto-x, where x is a decimal number that increases each time you create an unnamed checkpoint file.

This command does not require a license.

Examples

This example shows how to configure the rollback checkpoint:

```
switch# checkpoint stable
switch#
```

This example shows how to delete the checkpoint file:

```
switch# no checkpoint stable
```

```
switch#
```

Related Commands

Command	Description
clear checkpoint database	Displays the contents of the checkpoint file.

clear callhome session

To clear a Call home Cisco Fabric Services (CFS) distribution session, use the **clear callhome session** command.

clear callhome session

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 clear a Call home CFS distribution session:

```
switch(config)# clear callhome session
```

Related Commands

Command	Description
callhome	Enters the Call home configuration mode.
callhome send	Sends a configuration or diagnostic message to all configured Call home destinations.
show callhome	Displays the Call home configuration.

clear cdp

To clear Cisco Discovery Protocol (CDP) statistics on an interface, use the **clear cdp** command.

clear cdp {**counters** [**interface** *interface*] | **table** [**interface** *interface*]}

Syntax Description

counters	Clears CDP counters on all interfaces.
interface *interface*	(Optional) Clears CDP counters on an interface.
table	Clears CDP cache on all interfaces.

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 clear CDP statistics on an interface:

```
switch(config)# clear cdp counters
switch(config)#
```

Related Commands

Command	Description
enable cdp	Enables CDP on an interface.

clear checkpoint database

To delete all checkpoint files in the database, use the **clear checkpoint database** command.

clear checkpoint database

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 clear the checkpoint database:

```
switch# clear checkpoint database
Processing the Request... Please Wait
..... Done
switch#
```

Related Commands

Command	Description
show checkpoint	Displays the contents of the checkpoint file.

clear cores

To clear the core files, use the **clear cores** command.

clear cores [**archive**]

Syntax Description		
	archive	(Optional) Clears the core file on the logflash file system.

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 Use the **show system cores** command to display information about the core files.

This command does not require a license.

Examples This example shows how to clear the core file:

```
switch# clear cores
```

This example shows how to clear the core on the logflash file system:

```
switch# clear cores archive
```

Related Commands	Command	Description
	show system cores	Displays the core filename.
	system cores	Configures the core filename.

clear flow exporter

To clear the statistics for a Flexible NetFlow flow exporter, use the **clear flow exporter** command.

clear flow exporter {**name** *exporter-name* | *exporter-name*}

Syntax Description

name	Specifies the name of a flow exporter.
exporter-name	Name of an existing flow exporter.

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

You must have already enabled traffic monitoring with Flexible NetFlow using an exporter before you can use the **clear flow exporter** command.

This command does not require a license.

Examples

This example clears the statistics for the flow exporter named NFC-DC-PHOENIX:

```
switch# clear flow exporter name NFC-DC-PHOENIX
switch#
```

Related Commands

Command	Description
clear flow exporter	Clears the statistics for exporters.
flow exporter	Creates a flow exporter.
show flow exporter	Displays flow exporter status and statistics.

clear flow monitor

To clear a Flexible NetFlow flow monitor, flow monitor cache, or flow monitor statistics and to force the export of the data in the flow monitor cache, use the **clear flow monitor** command.

clear flow monitor {**name** *monitor-name* | *monitor-name*} [**cache** [**force-export**] | **statistics**]

Syntax Description

name	Specifies the name of a flow monitor.
monitor-name	Name of an existing flow monitor.
cache	(Optional) Clears the flow monitor cache information.
force-export	(Optional) Forces the export of the flow monitor cache statistics.
statistics	(Optional) Clears the flow monitor statistics.

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

You must enable Flexible NetFlow monitor before you can use the **clear flow monitor** command.

Use the **clear flow monitor monitor-name cache** command to remove all entries from the flow monitor cache. These entries will not be exported and the data gathered in the cache is lost.

The statistics for the cleared cache entries are maintained.

Use the **clear flow monitor monitor-name force-export** command to remove all entries from the flow monitor cache and exports them to all flow exporters that are assigned to the flow monitor. This process can result in an short term increase in the CPU utilization.

Caution Be careful when you use the **clear flow monitor monitor-name force-export** command because using this command might cause a short-term increase in the CPU utilization.

Use the **clear flow monitor monitor-name statistics** command to clear the statistics and cache entries for this flow monitor.

The Current entries statistic is not cleared because this statistic indicates how many entries are in the cache.

This command does not require a license.

Examples

This example shows how to clear the statistics and cache entries for the flow monitor named NFC-DC-PHOENIX:

```
switch# clear flow monitor name NFC-DC-PHOENIX
switch#
```

This example shows how to clear the statistics and cache entries for the flow monitor named NFC-DC-PHOENIX and forces an export:

```
switch# clear flow monitor NFC-DC-PHOENIX force-export
switch#
```

This example shows how to clear the cache for the flow monitor named NFC-DC-PHOENIX and forces an export:

```
switch# clear flow monitor NFC-DC-PHOENIX cache force-export
switch#
```

This example shows how to clear the statistics for the flow monitor named NFC-DC-PHOENIX:

```
switch# clear flow monitor NFC-DC-PHOENIX statistics
switch#
```

Related Commands

Command	Description
clear flow monitor	Clears the flow monitor.
flow monitor	Creates a flow monitor.
show flow sw-monitor	Displays flow monitor status and statistics.

clear hardware flow ip

To clear the NetFlow hardware IP flow, use the **clear hardware flow ip** command.

clear hardware flow ip [{{**vdc** *vdc_id*} | {**monitor** *name*} | {**profile** *profile-id*} | {**vlan** *vlan-id*} | {**interface** *if-type if-number*}}] [**instance** *inst*] [**force-export**] [**module** *num*]

Syntax Description

vdc *vdc_id*	Specifies the VDC. The range is from 1 to 16.
monitor *name*	Specifies the name of the NetFlow flow monitor. The monitor name can be any case-sensitive, alphanumeric string up to 64 characters.
profile *profile-id*	Specifies the name of the flow profile. The range is from 1 to 31.
vlan *vlan-id*	Specifies the VLAN. The range is from 1 to 4094.
interface	Specifies the interface.
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.
instance *inst*	(Optional) Specifies the EARL instance. The EARL instance can be any alphanumeric string up to 32 characters.
force-export	(Optional) Forces data to be exported to the collector prior to the clear operation.
module *num*	(Optional) Specifies the module.

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 clear the NetFlow hardware IP flow:

```
switch(config)# clear hardware flow ip module 8 ethernet 2/1
switch(config)#
```

Related Commands

Command	Description
show hardware flow {ip | ipv6}	Displays information about NetFlow hardware IP / IPV6 flows.

clear logging ip access-list cache

To clear all the entries from the Optimized ACL Logging (OAL) cache and send them to the syslog, use the **clear logging ip access-list cache** command.

clear logging ip access-list cache

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 clear all the entries from the OAL cache and send them to the syslog:

```
switch# clear logging ip access-list cache
switch#
```

Related Commands

Command	Description
show logging ip access-list	Displays the logging status for IP access lists.

clear logging logfile

To clear messages from the logging file, use the **clear logging logfile** command.

clear logging logfile

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 clear messages from the logging file:

```
switch# clear logging logfile
switch#
```

Related Commands

Command	Description
show logging logfile	Displays the logs in the local log file.

clear logging nvram

To clear the NVRAM logs, use the **clear logging nvram** command.

clear logging nvram

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 clear the NVRAM logs:

```
switch# clear logging nvram
switch#
```

Related Commands

Command	Description
show logging nvram	Displays the NVRAM logs.

clear logging onboard

To clear the onboard failure logging (OBFL) entries in the persistent log, use the **clear logging onboard** command.

clear logging onboard [**counter-stats**] [**environmental-history**] [**error-stats**] [**exception-log**] [**interrupt-stats**] [**module** *num*] [**obfl-log**] [**stack-trace**]

Syntax Description

counter-stats	(Optional) Clears the OBFL counter statistics.
environmental-history	(Optional) Clears the OBFL environmental history.
error-stats	(Optional) Clears the OBFL error statistics.
exception-log	(Optional) Clears the OBFL exception log entries.
interrupt-stats	(Optional) Clears the OBFL interrupt statistics.
module *num*	(Optional) Clears the OBFL information for a specific module.
obfl-log	(Optional) Clears the OBFL (boot-uptime/device-version/obfl-history).
stack-trace	(Optional) Clears the OBFL stack trace entries.

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.
4.0(2)	Added the **counter-stats** keyword.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to clear the OBFL environmental history entries:

```
switch# clear logging onboard environmental-history
switch#
```

This example shows how to clear the OBFL error statistics:

```
switch# clear logging onboard error-stats
switch#
```

This example shows how to clear the OBFL exception-log entries:

```
switch# clear logging onboard exception-log
switch#
```

This example shows how to clear the OBFL interrupt statistics:

```
switch# clear logging onboard interrupt-stats
switch#
```

This example shows how to clear the OBFL information for a specific module:

```
switch# clear logging onboard module 2
switch#
```

This example shows how to clear the OBFL (boot-uptime/device-version/obfl-history) entries:

```
switch# clear logging onboard obfl-log
switch#
```

This example shows how to clear the OBFL stack trace entries:

```
switch# clear logging onboard stack-trace
switch#
```

Related Commands

Command	Description
hw-module logging onboard	Enables OBFL based on the error type.
show logging onboard	Displays onboard failure logs.

clear logging session

To clear the current logging session, use the **clear logging session** command.

clear logging session

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 clear the current logging session:

```
switch# clear logging session
switch#
```

Related Commands

Command	Description
show logging session	Displays the logging session status.

clear ntp session

To clear the Network Time Protocol (NTP) session, use the **clear ntp session** command.

clear ntp session

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
4.2(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to clear the NTP session:

```
switch(config)# clear ntp session
```

clear ntp statistics

To clear the Network Time Protocol (NTP) statistics, use the **clear ntp statistics** command.

clear ntp statistics {**all-peers** | **io** | **local** | **memory**}

Syntax Description

all-peers	Clears statistics for all NTP peers.
io	Clears IO statistics.
local	Clears local statistics.
memory	Clears memory statistics.

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 clear statistics for all NTP peers:

```
switch(config)# clear ntp statistics all-peers
```

Related Commands

Command	Description
show ntp peers	Displays information about NTP peers.

clear nvram

To clear the NVRAM, use the **clear nvram** command.

clear nvram

Syntax Description

This command has no keywords or arguments.

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 clear NVRAM:

```
switch(config)# clear nvram
```

clear platform flow ip

To clear NetFlow hardware IPv4 entries, use the **clear platform flow ip** command.

clear platform flow ip [*type*] [**force-export**] [**module** *mod-num*]

Syntax Description

type	(Optional) Type of entry to clear. See the "Usage Guidelines" section for valid values.
force-export	(Optional) Specifies a forced export of the cleared data to a collector.
module *mod-num*	(Optional) Specifies a module. The ranges for the module number depends on the chassis used.

Defaults

If you do not specify the type, all types are cleared.

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 specify a forced export of the cleared data to a collector:

```
switch# clear platform flow ip forced-export
switch#
```

This example shows how to clear the NetFlow statistics for a module:

```
switch# clear platform flow ip module 2
switch#
```

Related Commands

Command	Description
flow exporter	Creates a flow exporter.
clear flow monitor	Clears the flow monitor.
flow monitor	Creates a flow monitor.
show flow sw-monitor	Displays flow monitor status and statistics.

clear processes log archive

To delete a log file on a log flash, use the **clear processes log archive** command.

clear processes log archive [**file** *file-number*]

Syntax Description

file *file-number*	(Optional) Specifies to delete a log file on a log flash.

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 delete a log file on a log flash:

```
switch(config)# clear processes log archive
switch(config)#
```

Related Commands

Command	Description
show processes log	Displays the contents of the process log.

clear ptp counters

To clear the Precision Time Protocol (PTP) packet counters, use the **clear ptp counters** command.

clear ptp counters { **all** | **interface ethernet** slot / port }

Syntax Description

all	Clears PTP packet counters for all PTP interfaces.
interface ethernet slot / port	Clears PTP packet counters for an Ethernet interface. The slot number is from 1 to 255 and the port number is from 1 to 128.

Defaults

None

Command Modes

EXEC mode

SupportedUserRoles

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

Command History

Release	Modification
7.3(0)DX(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to clear PTP counters for all PTP interfaces:

```
switch(config)# clear ptp counters all
switch(config)#
```

Related Commands

Command	Description
show ptp counters	Displays PTP specific packet counters for all Ethernet interfaces or for a specified interface.

clear rmon

To delete the Remote Network Monitoring (RMON) tables from a simple network management protocol (SNMP) notification, use the **clear rmon** command.

clear rmon {**alarms** | **events** | **hcalarms** | **all-alarms**}

Syntax Description

alarms	Clears all 32-bit alarms.
events	Clears the RMON log and also clears the RMON event table.
hcalarms	Clears all 64-bit RMON alarms.
all-alarms	Clears all 32-bit and 64-bit RMON alarms.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

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

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to delete RMON tables:

```
switch(config)# clear rmon alarms
switch(config)#
```

Related Commands

Command	Description
clear snmp counters	Deletes SNMP counters.

clear session state name

To clear the state information for a session, use the **clear session state name** command.

clear session state name *name*

Syntax Description		
	name	Name of the session. The name can be any case-sensitive, 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 clear the internal state for a configuration session:

```
switch# clear session state name myACLs
```

Related Commands	Command	Description
	show configuration session	Displays information about the configuration sessions.

clear snmp counters

To delete Simple Network Management Protocol (SNMP) counters, use the **clear snmp counters** command.

clear snmp counters

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to delete SNMP counters:

```
switch(config)# clear snmp counters
switch(config)#
```

To see if the counters have been reset, use the show command:

```
switch(config)# show snmp
sys contact:
sys location: anyplace, Anywhere

0 SNMP packets input
        0 Bad SNMP versions
        0 Unknown community name
        0 Illegal operation for community name supplied
        0 Encoding errors
        0 Number of requested variables
        0 Number of altered variables
        0 Get-request PDUs
        0 Get-next PDUs
        0 Set-request PDUs
0 SNMP packets output
        0 Too big errors
        0 No such name errors
```

```
0 Bad values errors
0 General errors
```

Related Commands

Command	Description
show snmp sessions	Displays information about SNMP sessions.

clear snmp hostconfig

To delete the Simple Network Management Protocol (SNMP) host configuration, use the **clear snmp hostconfig** command.

clear snmp hostconfig

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
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to delete the SNMP host configuration:

```
switch(config)# clear snmp hostconfig
switch(config)#
```

Related Commands

Command	Description
show snmp sessions	Displays SNMP sessions.
clear snmp counters	Deletes SNMP counters.

clear system reset-reason

To clear the device reset-reason history, use the **clear system reset-reason** command.

clear system reset-reason

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 clear the device reset-reason history:

```
switch# clear system reset-reason
```

Related Commands

Command	Description
show system reset-reason	Displays the device reset-reason history.

collect counter

To configure the number of bytes or packets in a flow as a nonkey field and collect the counter values (number of bytes or packets seen) for a Flexible NetFlow flow record, use the **collect counter** command. To disable the use of the number of bytes or packets in a flow (counters) as a nonkey field for a Flexible NetFlow flow record, use the **no** form of this command.

collect counter {**bytes** [**long**] | **packets** [**long**]}

no collect counter {**bytes** [**long**] | **packets** [**long**]}

Syntax Description

bytes	Configures the number of bytes seen in a flow as a nonkey field and collects the total number of bytes from the flow.
long	(Optional) Collects the total number of bytes from the flow using a 64-bit counter.
packets	Configures the number of bytes seen in a flow as a nonkey field and collects the total number of packets from the flow.

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to enable capturing the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

Use the **collect counter packets** command to configure a 32-bit counter that is incremented for each packet seen in the flow. For extremely long flow it is possible for this counter to wrap when it reaches the limit of 4 billion or more packets. When the flow monitor detects a scenario that could cause a wrap, the flow monitor with a normal cache type exports the flow and starts a new flow.

Use the **collect counter packets long** command to configure a 64-bit counter that is incremented for each packet seen in the flow. It is unlikely that a 64-bit counter will ever wrap.

This command does not require a license.

Examples

This example shows how to enable collecting the total number of bytes from the flows as a nonkey field:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect counter bytes
```

This example shows how to enable collecting the total number of bytes from the flows as a nonkey field using a 64 bit counter:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect counter bytes long
```

This example shows how to enable collecting the total number of packets from the flows as a nonkey field:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect counter packets
```

This example shows how to enable collecting the total number of packets from the flows as a nonkey field using a 64-bit counter:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect counter packets long
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input and/or output interface as a nonkey field and collects the values.
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the time stamp fields as nonkey fields and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
debug flow record	Enables debugging output for flow records.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as a key field.
match routing	Configures one or more of the routing fields as a key field.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

collect flow

To configure the flow direction or the flow sampler ID number as a nonkey field and collect their values for a Flexible NetFlow flow record, use the **collect flow** command. To disable the use of the flow direction or the flow sampler ID number as a nonkey field for a Flexible NetFlow flow record, use the **no** form of this command.

collect flow {**direction** | **sampler**}

no collect flow {**direction** | **sampler**}

Syntax Description

direction	Configures the flow direction as a nonkey field and collects the direction that the flow was monitored in.
sampler	Configures the flow sampler ID as a nonkey field and collects the ID of the sampler that is assigned to the flow monitor.

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to enable capturing the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

Use the **collect flow direction** command to indicate the direction of the flow. Use this command when you configure a single flow monitor for input and output flows and to find and eliminate flows that are being monitored twice: once on input and once on output.

Use the **collect flow sampler** command to collect the ID of the flow sampler that is used to monitor the flow. Use this command when more than one flow sampler is being used with different sampling rates. The **option sampler-table** command exports option records with mappings of the flow sampler ID to the sampling rate so that the collector can calculate the scaled counters for each flow.

This command does not require a license.

Examples

This example shows how to configure the direction of the flow nonkey that was monitored as a nonkey field:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect flow direction
```

This example shows how to configure an ID of the flow sampler that is assigned to the flow as a nonkey field and collects the ID of the flow sampler:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect flow sampler
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input and/or output interface as a nonkey field and collects the values.
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the times tamp fields as nonkey fields and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as a key field.
match routing	Configures one or more of the routing fields as a key field.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

collect interface

To configure the input or output interface as a nonkey field and collect the values for a Flexible NetFlow flow record, use the **collect interface** command. To disable the use of the input or output interface as a nonkey field for a Flexible NetFlow flow record, use the **no** form of this command.

collect interface {**input** | **output**}

no collect interface {**input** | **output**}

Syntax Description

input	Configures the input interface as a nonkey field and collects the input interface from the flows.
output	Configures the output interface as a nonkey field and collects the output interface from the flows.

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to enable capturing the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

This command does not require a license.

Examples

This example shows how to configure the input interface as a nonkey field and collect the input interface value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect interface input
```

This example shows how to configure the input interface as a nonkey field and collect the output interface value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect interface output
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input or output interface as a nonkey field and collects the values.
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the time stamp fields as a nonkey field and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as a key field.
match routing	Configures one or more of the routing fields as a key field.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

collect routing

To configure a routing attribute as a nonkey field and collect the value of the field for a Flexible NetFlow flow record, use the **collect routing** command. To disable the use of a routing attribute as a nonkey field for a Flexible NetFlow flow record, use the **no** form of this command.

collect routing {{**destination** | **source**} **as** [**peer**] | **traffic-index** | **forwarding-status** | **next-hop address ipv4** [**bgp**]}

no collect routing {{**destination** | **source**} **as** [**peer**] | **traffic-index** | **forwarding-status** | **next-hop address ipv4** [**bgp**]}

Syntax Description

destination	Configures one or more of the destination routing attributes fields as a nonkey field and collects the values from the flows.
source	Configures one or more of the source routing attributes fields as a nonkey field and collects the values from the flows.
as	Configures the destination AS field as a nonkey field and collects the value in the AS field from the flows.
peer	(Optional) Configures the destination AS number of the peer network as a nonkey field and collects the value of the AS number of the peer network from the flows.
traffic-index	Configures the Border Gateway Protocol (BGP) source or destination traffic index as a nonkey field and collects the value of the BGP destination traffic index from the flows.
forwarding-status	Collects the forwarding status of the packet and triggers the collection of flows denied by Access Control List (ACL) entries.
next-hop address ipv4	Configures the next-hop value as a nonkey field and collects information regarding the next-hop from the flows.
bgp	(Optional) Configures the IP address of the next hop BGP network as a nonkey field and collects the value of the IP address of the BGP next-hop network from the flows.

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to captures the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

Use the **collect routing source as** [*peer*] command to collect the 16-bit AS number based on a lookup of the router's routing table using the source IP address. The optional **peer** keyword provides the expected next network, not the originating network.

Note The the 16-bit AS number is based on how packets are routed back from this router and the value might not be accurate for asymmetrical routes.

Use the **collect routing destination as** [*peer*] command to collect the 16-bit AS number based on a lookup of the router's routing table using the destination IP address. The optional **peer** keyword provides the expected next network, not the destination network.

Use the **collect routing source traffic-index** command to collect the traffic index field based on the source AS for this flow. The traffic-index field is a value that is propagated through BGP.

Use the **collect routing forwarding-status** command to collect a field to indicate if the packets were successfully forwarded. The field is in two parts and may be up to 4 bytes in length. At this time, only the status field is used:

```
+-+-+-+-+-+-+-+-+
| S | Reason    |
| t | codes     |
    | a | or    |
| t | flags     |
| u |           |
| s |           |
+-+-+-+-+-+-+-+-+
0 1 2 3 4 5 6 7

  Status:
  00b=Unknown, 01b = Forwarded, 10b = Dropped, 11b = Consumed
```

This command does not require a license.

Examples

This example shows how to configure the 16-bit AS number based on a lookup of the router’s routing table using the source IP address as a nonkey field and collects the 16-bit AS number value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect routing source as
```

This example shows how to configure the 16-bit AS number based on a lookup of the router’s routing table using the destination IP address as a nonkey field and collects the 16-bit AS number value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect routing destination as
```

This example shows how to configure the value in the traffic index field based on the source AS for a flow as a nonkey field and collects the value in the traffic index field value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect routing source traffic-index
```

This example shows how to configure the forwarding status as a nonkey field and collects the forwarding status value:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect routing forwarding-status
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input or output interface as a nonkey field and collects the values.
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the times tamp fields as a nonkey field and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as key fields.
match routing	Configures one or more of the routing fields as key fields.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

collect timestamp sys-uptime

To configure the TIMESTAMP SYS-UPTIME field as a nonkey field and collect the values in them for a Flexible NetFlow flow record, use the **collect timestamp sys-uptime** command. To disable the use of the TIMESTAMP SYS-UPTIME field as a nonkey for a Flexible NetFlow flow record, use the **no** form of this command.

collect timestamp sys-uptime {**first** | **last**}

no collect timestamp sys-uptime {**first** | **last**}

Syntax Description

first	Configures the sys-uptime for the time that the first packet was seen from the flows as a nonkey field and collects time stamps based on the sys-uptime for the time that the first packet was seen from the flows.
last	Configures the sys-uptime for the time that the last packet was seen from the flows as a nonkey field and collects time stamps based on the sys-uptime for the time that the most recent packet was seen from the flows.

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to enable capturing the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

This command does not require a license.

Examples

This example shows how to configure timestamps based on the sys-uptime for the time that the first packet was seen from the flows as a nonkey field and collects the sys-uptime for the time that the first packet was seen from the flows:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect timestamp sys-uptime first
```

This example shows how to configure timestamps based on the sys-uptime for the time that the most recent packet was seen from the flows as a nonkey field and collects the sys-uptime for the time that the most recent packet was seen from the flows:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect timestamp sys-uptime last
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input or output interface as a nonkey field and collects the values.
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the time stamp fields as a nonkey field and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as key fields.
match routing	Configures one or more of the routing fields as key fields.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

collect transport tcp flags

To configure a Transmission Control Protocol (TCP) field as a nonkey field and collect the value in it for a Flexible NetFlow flow record, use the **collect transport tcp flags** command. To disable the use of a TCP field as a nonkey field for a Flexible NetFlow flow record, use the **no** form of this command.

collect transport tcp flags

no collect transport tcp flags

Syntax Description

This command has no arguments or keywords

Defaults

This command is not enabled by default.

Command Modes

Flow record configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Flexible NetFlow commands that start with **collect** are used to configure nonkey fields for the flow monitor record and to enable capturing the values in the fields for the flow created with the record. The values in nonkey fields are added to flows to provide additional information about the traffic in the flows. A change in the value of a nonkey field does not create a new flow. In most cases, the values for nonkey fields are taken from only the first packet in the flow.

This command does not require a license.

Examples

This example shows how to configure the TCP flags as a nonkey field:

```
switch(config)# flow record FLOW-RECORD-1
switch(config-flow-record)# collect transport tcp flags
```

Related Commands

Command	Description
collect counter	Configures the counters as a nonkey field and collects the counter values.
collect flow	Configures flow identifying fields as nonkey fields and collects their values.
collect interface	Configures the input or output interface as a nonkey field and collects the values.

Command	Description
collect ipv4	Configures an IPv4 field as a nonkey field and collects the value in it.
collect routing	Configures a routing attribute as a nonkey field and collects the value of the field.
collect timestamp	Configures the timestamp fields as nonkey fields and collects the values.
collect transport	Configures a transport layer field as a nonkey field and collects the values.
flow record	Creates a flow record.
match flow	Configures one or more of the flow fields as key fields.
match interface	Configures the direction that traffic flows in respect to an interface (interface field) as a key field.
match ipv4	Configures one or more of the IPv4 fields as key fields.
match routing	Configures one or more of the routing fields as key fields.
match timestamp	Configures a time stamp field as a key field.
match transport	Configures one or more of the transport fields as key fields.
show flow record	Displays the flow record status and statistics.

commit (Call home)

To distribute a Cisco Fabric Services (CFS) configuration, use the **commit** command.

commit

Syntax Description

This command has no arguments or keywords

Defaults

None

Command Modes

Call home configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

The **commit** command results in the distribution of the CFS configuration to the running configuration of all CFS-enabled devices in the fabric.

You can only use the **commit** command on the specific device where the fabric lock was acquired.

Configuration changes that have not been committed yet (still saved as a working copy) are not in the running configuration and do not display in the output of **show** commands.

An empty commit is allowed to distribute a current configuration if you want to make sure that all devices are synchronized.

This command does not require a license.

Examples

This example shows how to commit a CFS configuration and verify that the commit was successful:

```
switch(config-callhome)# commit
switch(config-callhome)# show callhome session status
Last Action Time Stamp     : Tue Dec 23 11:15:02 2008
Last Action                : Commit
Last Action Result         : Success
Last Action Failure Reason : none
```

Related Commands

Command	Description
abort	Deletes the CFS session.
show cfs application	Displays the applications that are currently CFS-enabled.
show *application_name* **session status**	Displays information about the CFS configuration session status for an application.

commit (Session Manager)

To validate and apply the commands in the Session Manager configuration session, use the **commit** command.

commit [**verbose**]

Syntax Description

verbose	(Optional) Displays a detailed version of the results of the **commit** command.

Defaults

None

Command Modes

Session configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The **commit** command results in a validation of the entire Session Manager configuration, and, if valid, the configuration is applied to the device,

This command does not require a license.

Examples

This example shows how to commit a Session Manager configuration:

```
switch# config session ACL_tcp_in
Config Session started, Session ID is 1
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config-s)# verify
Verification Successful
switch(config-s)# commit
Commit Successful
switch#
```

Related Commands

Command	Description
abort	Deletes the session and exists session configuration mode.
exit	Exits session configuration mode without committing the commands.
show configuration session	Displays information about the Session Manager configuration session.

configure maintenance profile

To enter a maintenance profile configuration session to create a custom maintenance mode profile or a custom normal mode profile, use the **configure maintenance profile** command. To delete the existing maintenance mode profile or normal mode profile, use the **no** form of this command. Starting with Cisco NX-OS Release 7.3(0)D1(1), we recommend not using the **configure profile** [**maintenance-mode** | **normal-mode**] **type admin** command and we strongly recommend using the **configure maintenance profile** [**maintenance-mode** | **normal-mode**] command.

configure maintenance profile [maintenance-mode | normal-mode]

no configure maintenance profile [maintenance-mode | normal-mode]

Syntax Description

maintenance-mode	Enters the maintenance profile configuration session for a maintenance mode profile.
normal-mode	Enters the maintenance profile configuration session for a normal mode profile.

Defaults

None

Command Modes

Privileged EXEC (#)

Global configuration mode (config)

SupportedUserRoles

network-admin
vdc-admin

network-operator

vdc-operator

Command History

Release	Modification
7.3(0)D1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enter a maintenance profile configuration session for a maintenance mode profile:

```
switch# configure maintenance profile maintenance-mode
Please configure 'system mode maintenance always-use-custom-profile' if you want to use
custom profile always for maintenance mode.
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-mm-profile)#
```

This example shows how to enter a maintenance profile configuration session for a normal mode profile:

```
switch# configure maintenance profile normal-mode
Please configure 'system mode maintenance always-use-custom-profile' if you want to use
custom profile always for maintenance mode.
Enter configuration commands, one per line. End with CNTL/Z.
switch(config-mm-profile)#
```

This example shows how to delete a maintenance profile:

```
switch# no configure maintenance profile maintenance-mode
Maintenance mode profile maintenance-mode successfully deleted
Enter configuration commands, one per line. End with CNTL/Z.
Exit maintenance profile mode.
```

Related Commands

Command	Description
show run mmode	Displays the currently running maintenance profile configuration on a switch.
show system mode	Displays the current system mode and the current state of the maintenance mode timer when the switch is in maintenance mode.
system mode maintenance always-use-custom-profile	Applies the existing custom maintenance-mode profile and prevents creation of auto-generated maintenance-mode profile.
system mode maintenance on-reload reset-reason	Boots the switch into maintenance-mode automatically in the event of a specified system crash.
system mode maintenance shutdown	Shuts down all protocols and interfaces except the management interface (by using the **shutdown** command and not the default **isolate** command).
system mode maintenance timeout	Configures the maintenance window timer to keep the switch in maintenance mode for a specified number of minutes.

configure session

To create or modify an access control list (ACL) configuration session with the Session Manager feature, use the **configure session** command.

configure session *name*

Syntax Description

name	Name of the session. The name can be any case-sensitive, 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.

Session Manager supports only the ACL feature.

Examples

This example shows how to create an ACL configuration session:

```
switch# configure session myACLs
switch(config-s)#
```

Related Commands

Command	Description
show configuration session	Displays information about the Session Manager configuration sessions.

configure profile maintenance-mode type admin

To enter the configuration session for the maintenance mode profile file, use the **configure profile maintenance-mode type admin** command.

configure profile maintenance-mode type admin

Syntax Description

This command has no arguments or keywords.

Defaults

None.

Command Modes

Profile configuration.

Command History

Release	Modification
7.2.0	This command was introduced.

Examples

This example shows how to create a maintenance mode profile file:

```
switch# configure terminal
switch(config)# configure profile maintenance-mode type admin
switch(config-profile)# router ospf 100
switch(config-profile-router)# max-metric router-lsa
switch(config-profile-router)# exit
switch(config-profile)# router eigrp 101
switch(config-profile-router)# max-metric router-lsa
switch(config-profile-router)# exit
switch(config-profile)# router isis 102
switch(config-profile-router)# max-metric router-lsa
switch(config-profile-router)# set-overload-bit always
switch(config-profile-router)# exit
switch(config-profile)# router bgp 103
switch(config-profile-router)# max-metric router-lsa
switch(config-profile-router)# exit
switch(config-profile)# vpc domain 20
switch(config-profile-router)# max-metric router-lsa
switch(config-profile-router)# exit
switch(config-profile)# system interface shutdown
switch(config-profile)# end
Exit configure profile mode.
switch#
```

configure profile normal-mode type admin

To enter the configuration session for the normal mode profile file, use the **configure profile normal-mode type admin** command.

configure profile normal-mode type admin

Syntax Description

This command has no arguments or keywords.

Defaults

None.

Command Modes

Profile configuration.

Command History

Release	Modification
	This command was introduced.

Usage Guidelines

Examples

This example shows how to create a normal mode profile file:

```
switch# configure terminal
switch(config)# configure profile normal-mode type admin
switch(config-profile)# router ospf 100
switch(config-profile-router)# no shutdown
switch(config-profile-router)# exit
switch(config-profile)# router eigrp 101
switch(config-profile-router)# no shutdown
switch(config-profile-router)# exit
switch(config-profile)# router isis 102
switch(config-profile-router)# no shutdown
switch(config-profile-router)# no set-overload-bit always
switch(config-profile-router)# exit
switch(config-profile)# router bgp 103
switch(config-profile-router)# no shutdown
switch(config-profile-router)# exit
switch(config-profile)# vpc domain 20
switch(config-profile-router)# no shutdown
switch(config-profile-router)# exit
switch(config-profile)# no system interface shutdown
switch(config-profile)# end
Exit configure profile mode.
switch#
```

contract-id

To specify a service agreement contract ID in Call home, use the **contract-id** command. To remove it, use the **no** form of this command.

contract-id *contract_id_number*

no contract-id

Syntax Description

contract_id_number	Contract number for this device from the service agreement. The contract number can be up to 255 alphanumeric characters in free format.

Defaults

None

Command Modes

Call home 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 service agreement contract ID in Call home:

```
switch(config-callhome)# contract-id Contract5678
```

Related Commands

Command	Description
callhome	Places you into Call home configuration mode.
email-contact	Specifies the e-mail address of the person responsible for the device.
phone-contact	Specifies the phone number of the person responsible for the device.
streetaddress	Specifies the street address of the person responsible for the device.
customer-id	Specifies the service agreement customer number for this device.
site-id	Specifies the site ID number for this device.
switch-priority	Specifies the priority number for this device.
show callhome	Displays the Call home configuration.

counter

To configure a Simple Network Management Protocol (SNMP) port-monitor counter, use the **counter** command. To remove the port-monitor counter configuration, use the **no** form of this command.

counter {**invalid-crc** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **invalid-words** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **link-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **protocol-error** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **rx-performance** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **signal-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **sync-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **tx-performance** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}]}

no counter {**invalid-crc** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **invalid-words** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **link-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **protocol-error** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **rx-performance** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **signal-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] | **sync-loss** [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}] |

tx-performance [**poll-interval** *poll-interval* {**absolute rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*] | **delta rising-threshold** *rising-threshold* **event** *event-id* [**falling-threshold** *falling-threshold* **event** *event-id*]}]}

Syntax Description

invalid-crc	Configures the invalid-crc counter.
poll-interval	(Optional) Poll interval for counter in seconds. The range is from 0 to 2147483647.
absolute	Specifies the absolute type threshold.
rising-threshold	Configures the rising-threshold value.
rising-threshold	Rising-threshold limit. The range is from 0 to18446744073709551615.
event	Configures the rising-threshold event.
event-id	Event ID from the event configuration.The range is from 1 to 65535.
falling-threshold	(Optional) Configures the falling-threshold value.
falling-threshold	(Optional) Falling-threshold limit. The range is from –2147483648 to 2147483647.
delta	(Optional) Specifies the delta type threshold.
invalid-words	Configures the invalid-words counter.
link-loss	Configures the link-loss counter.
protocol-error	Configures the protocol-error counter.
rx-performance	Configures the ingress (rx) performance counter.
signal-loss	Configures the signal-loss counter.
sync-loss	Configures the sync-loss counter.
tx-performance	Configures the egress (tx) performance counter.

Defaults

None

Command Modes

Port-monitor configuration (config-port-monitor)

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure an SNMP counter:

```
switch(config) port-monitor name PM1
switch(config-port-monitor)# counter invalid-crc poll-interval 30 absolute
rising-threshold 10000000 event 100
```

```
switch(config-port-monitor)#
```

This example shows how to remove an SNMP counter configuration:

```
switch(config)# no counter invalid-crc poll-interval 30 absolute rising-threshold 10000000
event 100
switch(config-port-monitor)#
```

Related Commands

Command	Description
monitor counter	Configures a monitor counter.

customer-id

To specify a service agreement customer ID in Call home, use the **customer-id** command. To remove it, use the **no** form of this command.

customer-id *contract_id_number*

no customer-id

Syntax Description

contract_id_number	Customer number for this device from the service agreement. The customer number can be up to 255 alphanumeric characters in free format.

Defaults

None

Command Modes

Call home 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 service agreement customer ID in Call home:

```
switch(config-callhome)# customer-id Customer123456
```

Related Commands

Command	Description
callhome	Places you into Call home configuration mode.
email-contact	Specifies the e-mail address of the person responsible for the device.
phone-contact	Specifies the phone number of the person responsible for the device.
streetaddress	Specifies the street address of the person responsible for the device.
contract-id	Specifies the service agreement contract number for this device.
site-id	Specifies the site ID number for this device.
switch-priority	Specifies the priority number for this device.
show callhome	Displays the Call home configuration.