

# **C** Commands

This chapter describes the Cisco NX-OS security commands that begin with C.

## checkpoint

To take a snapshot of the current running configuration and store the snapshot in the file system in an ASCII format, use the **checkpoint** command.

**checkpoint** [checkpoint-name [description descp-text [...description descp-text]] | description descp-text | file {bootflash: | volatile:}[//server][directory/][filename]]

**no checkpoint** [checkpoint-name | **description** descp-text | **file** {**bootflash:** | **volatile:**}[//server][directory/][filename]]

#### **Syntax Description**

checkpoint-name	(Optional) Checkpoint name. The name can be a maximum of 32 characters.
description descp-text	(Optional) Specifies a description for the given checkpoint. The text can be a maximum of 80 characters and can contain spaces.
file	(Optional) Specifies that a file be created to store the configuration rollback checkpoint.
bootflash:	Specifies the bootflash local writable storage file system.
volatile:	Specifies the volatile local writable storage file system.
<i>Ilserver</i>	(Optional) Name of the server. Valid values are ///, //module-1/, //sup-1/, //sup-active/, or //sup-local/. The double slash (//) is required.
directoryl	(Optional) Name of a directory. The directory name is case sensitive.
filename	(Optional) Name of the checkpoint configuration file. The filename is case sensitive.



There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

#### **Command Default**

Automatically generates checkpoint name (user-checkpoint-number).

## **Command Modes**

EXEC mode

#### **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

#### **Usage Guidelines**

Checkpoints are local to a switch. When you create a checkpoint, a snapshot of the current running configuration is stored in a checkpoint file. If you do not provide a checkpoint name, Cisco NX-OS sets the checkpoint name to **user-checkpoint**-*number*, where the *number* is from 1 to 10.

If Fibre Channel over Ethernet (FCoE) is enabled on the switch, you cannot restore the active configuration to the checkpoint state. The following error message appears when you create a checkpoint on a FCoE-enabled switch:

```
switch# checkpoint chkpoint-1
ERROR: ascii-cfg: FCOE is enabled. Disbaling rollback module (err_id 0x405F004C)
switch#
```

On a switch that has FCoE disabled, you see the following message when you create the checkpoint:

```
switch# checkpoint chkpoint-1
...Done
switch#
```

You can create up to ten checkpoints of your configuration per switch. When the number of checkpoints reaches the maximum limit, the oldest entry is removed.

You cannot apply the checkpoint file of one switch into another switch. You cannot start a checkpoint filename with the word *system*.

The checkpoint files are stored as text files that you cannot directly access or modify. When a checkpoint is cleared from the system, the associated checkpoint configuration file is deleted.

## **Examples**

This example shows how to create a checkpoint:

```
switch# checkpoint
...
user-checkpoint-4 created Successfully
Done
switch#
```

This example shows how to create a checkpoint, named chkpnt-1, and define its purpose:

```
switch# checkpoint chkpnt-1 description Checkpoint to save current configuration, Sep 9
10:02 A.M.
switch#
```

This example shows how to create a checkpoint configuration file named chkpnt\_configSep9-1.txt in the bootflash storage system:

```
switch# checkpoint file bootflash:///chkpnt_configSep9-1.txt
switch#
```

This example shows how to delete a checkpoint named chkpnt-1:

```
switch# no checkpoint chkpnt-1
switch#
```

Command	Description
clear checkpoint	Clears the checkpoints on the switch.
rollback	Rolls back the switch to any of the saved checkpoints.
show checkpoint all	Displays all checkpoints configured in the switch.
show checkpoint summary	Displays a summary of all checkpoints configured in the switch.
show checkpoint summary user	Displays all checkpoints created by an user.
show checkpoint system	Displays all checkpoints that were automatically created in the system.

## clear access-list counters

To clear the counters for all IPv4 access control lists (ACLs) or a single IPv4 ACL, use the **clear** access-list counters command.

**clear access-list counters** [access-list-name]

## **Syntax Description**

access-list-name	(Optional) Name of the IPv4 ACL whose counters the switch clears. The
	name can be a maximum of 64 alphanumeric characters.

## **Command Default**

None

## **Command Modes**

EXEC mode

## **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to clear counters for all IPv4 ACLs:

switch# clear access-list counters

This example shows how to clear counters for an IPv4 ACL named acl-ipv4-01:

switch# clear access-list counters acl-ipv4-01

Command	Description
access-class	Applies an IPv4 ACL to a VTY line.
ip access-group	Applies an IPv4 ACL to an interface.
ip access-list	Configures an IPv4 ACL.
show access-lists	Displays information about one or all IPv4, IPv6, and MAC ACLs.
show ip access-lists	Displays information about one or all IPv4 ACLs.

## clear accounting log

To clear the accounting log, use the **clear accounting log** command.

clear accounting log

**Syntax Description** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

EXEC mode

**Command History** 

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to clear the accounting log:

switch# clear accounting log

Command	Description
show accounting log	Displays the accounting log contents.

## clear checkpoint database

To clear the checkpoints configured on the switch, use the clear checkpoint database command.

clear checkpoint database [system | user]

## **Syntax Description**

system	Clears the configuration rollback checkpoint database for system checkpoints.
user	Clears the configuration rollback checkpoint database for user checkpoints.

#### **Command Default**

None

## **Command Modes**

EXEC mode

## **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to clear the configured checkpoints:

switch# clear checkpoint database

.Done switch#

Command	Description
checkpoint	Creates a checkpoint.
show checkpoint	Displays all configured checkpoints.

## clear ip arp

To clear the Address Resolution Protocol (ARP) table and statistics, use the clear ip arp command.

clear ip arp [vlan vlan-id [force-delete | vrf {vrf-name | all | default | management}]]

## **Syntax Description**

vlan vlan-id	(Optional) Clears the ARP information for a specified VLAN. The range is from 1 to 4094, except for the VLANs reserved for internal use.
force-delete	(Optional) Clears the entries from ARP table without refresh.
vrf	(Optional) Specifies the virtual routing and forwarding (VRF) to clear from the ARP table.
vrf-name	VRF name. The name can be a maximum of 32 alphanumeric characters and is case sensitive.
all	Specifies that all VRF entries be cleared from the ARP table.
default	Specifies that the default VRF entry be cleared from the ARP table.
management	Specifies that the management VRF entry be cleared from the ARP table.

#### **Command Default**

None

#### **Command Modes**

Any command mode

## **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

## **Examples**

This example shows how to clear the ARP table statistics:

switch# clear ip arp
switch#

This example shows how to clear the ARP table statistics for VLAN 10 with the VRF vlan-vrf:

switch# clear ip arp vlan 10 vrf vlan-vrf
switch#

Command	Description
show ip arp	Displays the ARP configuration status.

## clear ip arp inspection log

To clear the Dynamic ARP Inspection (DAI) logging buffer, use the **clear ip arp inspection log** command.

## clear ip arp inspection log

**Syntax Description** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

## **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

## **Examples**

This example shows how to clear the DAI logging buffer:

switch# clear ip arp inspection log
switch#

Command	Description
ip arp inspection log-buffer entries	Configures the DAI logging buffer size.
show ip arp inspection	Displays the DAI configuration status.
show ip arp inspection log	Displays the DAI log configuration.
show ip arp inspection statistics	Displays the DAI statistics.

## clear ip arp inspection statistics vlan

To clear the Dynamic ARP Inspection (DAI) statistics for a specified VLAN, use the **clear ip arp inspection statistics vlan** command.

clear ip arp inspection statistics vlan vlan-list

## **Syntax Description**

vlan vlan-list	Specifies the VLANs whose DAI statistics this command clears. The
	vlan-list argument allows you to specify a single VLAN ID, a range of
	VLAN IDs, or comma-separated IDs and ranges. Valid VLAN IDs are from
	1 to 4094, except for the VLANs reserved for the internal switch use.

## **Command Default**

None

## **Command Modes**

Any command mode

## **Command History**

Release	Modification
5.2(1)N1(1)	This command was introduced.

## **Examples**

This example shows how to clear the DAI statistics for VLAN 2:

switch# clear ip arp inspection statistics vlan 2
switch#

This example shows how to clear the DAI statistics for VLANs 5 through 12:

switch# clear ip arp inspection statistics vlan 5-12
switch#

This example shows how to clear the DAI statistics for VLAN 2 and VLANs 5 through 12:

switch# clear ip arp inspection statistics vlan 2,5-12
switch#

Command	Description
clear ip arp inspection log	Clears the DAI logging buffer.
ip arp inspection log-buffer	Configures the DAI logging buffer size.
show ip arp inspection	Displays the DAI configuration status.
show ip arp inspection vlan	Displays DAI status for a specified list of VLANs.

# clear ip dhcp snooping binding

To clear the Dynamic Host Configuration Protocol (DHCP) snooping binding database, use the **clear ip dhcp snooping binding** command.

clear ip dhcp snooping binding [vlan vlan-id [mac mac-address ip ip-address] [interface {ethernet slot/[QSFP-module/]port | port-channel channel-number}]]

## **Syntax Description**

vlan vlan-id	(Optional) Specifies the VLAN ID of the DHCP snooping binding database entry to be cleared. Valid VLAN IDs are from 1 to 4094, except for the VLANs reserved for the internal switch use.
mac-address mac-address	(Optional) Specifies the MAC address of the binding database entry to be cleared. Enter the <i>mac-address</i> argument in dotted hexadecimal format.
ip ip-address	(Optional) Specifies the IPv4 address of the binding database entry to be cleared. Enter the <i>ip-address</i> argument in dotted decimal format.
interface	(Optional) Specifies the Ethernet or EtherChannel interface.
ethernet slot/[QSFP-module/]port	(Optional) Specifies the Ethernet interface and its slot number and port number. The slot number is from 1 to 255. The <i>QSFP-module</i> number is from 1 to 4. The port number is from 1 to 128.
	<b>Note</b> The <i>QSFP-module</i> number applies only to the QSFP+ Generic Expansion Module (GEM).
port-channel channel-number	(Optional) Specifies the Ethernet port channel of the binding database entry to be cleared.

## **Command Default**

None

## **Command Modes**

Any command mode

## **Command History**

Release	Modification
6.0(2)N1(2)	Support for the QSFP+ GEM was added.
5.2(1)N1(1)	This command was introduced.

## **Examples**

This example shows how to clear the DHCP snooping binding database:

switch# clear ip dhcp snooping binding
switch#

This example shows how to clear a specific entry from the DHCP snooping binding database:

 ${\tt switch\#\ clear\ ip\ dhcp\ snooping\ binding\ vlan\ 23\ mac\ 0060.3aeb.54f0\ ip\ 10.34.54.9\ interface\ ethernet\ 2/11}$ 

switch#

Command	Description
copy running-config startup-config	Copies the running configuration to the startup configuration.
show ip dhcp snooping binding	Displays IP-MAC address bindings, including the static IP source entries.
show running-config dhcp	Displays DHCP snooping configuration, including the IP Source Guard configuration.

## clear ip dhcp snooping statistics

To clear the Dynamic Host Configuration Protocol (DHCP) snooping statistics, use the **clear ip dhcp snooping statistics** command.

clear ip dhcp snooping statistics

**Syntax Description** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Any command mode

**Command History** 

Release	Modification
5.2(1)N2(1)	This command was introduced.

## **Examples**

This example shows how to clear the DHCP snooping statistics:

switch# clear ip dhcp snooping statistics
switch#

Command	Description
copy running-config startup-config	Copies the running configuration to the startup configuration.
show ip dhcp snooping statistics	Displays DHCP snooping statistics.
show running-config dhcp	Displays DHCP snooping configuration, including the IP Source Guard configuration.

## cts role-based batched-programming

To enable CTS batched programming, use the cts role-based batched-programming command.

cts role-based batched-programming

no cts role-based batched-programming

**Syntax Description** 

This command has no arguments or keywords.

**Command Default** 

None

**Command Modes** 

Configuration mode

**Command History** 

Release	Modification
6.0(2)N2(2)	This command was introduced.

## **Examples**

This example shows how to enable CTS batched programming:

switch# configure terminal

switch(config) # cts role-based batched-programming

Command	Description	

cts role-based batched-programming