

Send document comments to nexus7k-docfeedback@cisco.com



Cisco Nexus 7000 Series NX-OS High Availability Commands

Cisco NX-OS is a resilient operating system that is specifically designed for high availability at the network, system, and process level. For more information about high availability (HA) concepts and features for Cisco NX-OS devices, see the *Cisco Nexus 7000 Series NX-OS High Availability and Redundancy Guide*.

This chapter describes the Cisco Nexus 7000 Series NX-OS high availability commands.

Send document comments to nexus7k-docfeedback@cisco.com

clear bootvar log

To delete the boot variable log, use the **clear bootvar log** command.

clear bootvar log

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-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 delete the boot variable log:

```
switch# clear bootvar log
switch#
```

Related Commands	Command	Description
	show boot	Displays all configured boot variables.
	show boot variable	Displays the boot variable names.

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

clear cores

To delete core dump files of a virtual device context (VDC) from the logflash, use the **clear cores** command.

clear cores archive file *file-name*

Syntax Description	archive	Specifies all core dump files for a VDC from the logflash on the module.
	file <i>file-name</i>	Specifies the file on the logflash that needs to be deleted.

Defaults None

Command Modes Any command mode

Supported User Roles network-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 delete core dump files of a VDC from the logflash:

```
switch(config)# clear cores archive
switch(config)#
```

Related Commands	Command	Description
	show cores	Displays core dump files of a virtual context device (VDC).

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

clear xbar-driver

To delete the crossbar-related information, use the **clear x-bar driver** command.

```
clear xbar-driver [xbar xbar-number | local xbar counter]
```

Syntax Description	
xbar <i>xbar-number</i>	(Optional) Specifies the crossbar number. The range is from 1 to 5.
local <i>xbar counter</i>	(Optional) Specifies the crossbar slot number. The range is from 1 to 4.

Defaults	None
----------	------

Command Modes	Any command mode
---------------	------------------

Supported User Roles	network-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 delete the crossbar-related information: <pre>switch# clear xbar-driver xbar 2 inst 1 counters port_num 1 all switch#</pre>
----------	--

Related Commands	Command	Description
	show module fabric	Displays information about the module fabric.
	show hardware fabric-utilization	Displays information about the hardware fabric utilization.

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

out-of-service

To power off a supervisor module in the Cisco NX-OS software, use the **out-of-service** command.

out-of-service module *module-number*

Syntax Description	module	Specifies an I/O module.
	<i>module-number</i>	Module number. The range is from 1 to 18.

Defaults None

Command Modes Global configuration mode

Supported User Roles network-admin
vdc-admin

Command History	Release	Modification
	5.2(1)	Removed the xbar keyword.
	4.0(1)	This command was introduced.

Usage Guidelines This command is not supported on line card modules. For line card modules, use the **poweroff** command. You can use the **out-of-service** command only in the default virtual device context (VDC). Use this command to safely remove a module from service in the software. Before bringing a module back into service, you must remove the physical hardware module from the chassis and reinsert it. This command does not require a license.

Examples This example shows how to take a supervisor module out of service:

```
switch# configure terminal
switch(config)# out-of-service module 3
```

Related Commands	Command	Description
	poweroff	Shuts down a supervisor of a line card module in the Cisco NX-OS software.
	reload module	Reloads a module in a device.

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

poweroff

To power off a supervisor of a line card module in the Cisco NX-OS software, use the **poweroff** command.

```
poweroff {module module-number | xbar xbar-number}
```

Syntax Description

module <i>module-number</i>	Specifies an I/O module. The range is from 1 to 18.
xbar <i>xbar-number</i>	Specifies a fabric module. The range is from 1 to 5.

Defaults

None

Command Modes

Global configuration mode

Supported User Roles

network-admin
vdc-admin

Command History

Release	Modification
5.2(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to take a supervisor module out of service:

```
switch# configure terminal
switch(config)# poweroff module 5
```

Related Commands

Command	Description
out-of-service	Shuts down a supervisor module in the Cisco NX-OS software.
reload module	Reloads a module in a device.

Send document comments to nexus7k-docfeedback@cisco.com

power redundancy-mode

To configure the power supply redundancy mode, use the **power redundancy-mode** command. To disable the power redundancy mode, use the **no** form of this command.

power redundancy-mode { **combined** | **insrc-redundant** | **ps-redundant** | **redundant** }

no power redundancy-mode { **combined** | **insrc-redundant** | **ps-redundant** | **redundant** }

Syntax Description

combined	Specifies the combined power supply mode.
insrc-redundant	Specifies the input source redundancy mode.
ps-redundant	Specifies the power support redundancy mode.
redundant	Specifies the full redundancy mode.

Defaults

ps-redundant

Command Modes

Global configuration

Supported User Roles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use the **power redundancy-mode** command only in the default virtual device context (VDC). You can configure the power supplies with the following modes:

- **Combined mode**—This mode does not provide power redundancy. The available power for this mode is the total power capacity of all power supplies.
- **Power supply redundancy mode**—This mode provides an extra power supply in case an active power supply goes down. With this mode, the power supply that can supply the most power operates in the standby mode. The other one or two power supplies are active. The available power is the amount of power provided by the active power supply units.
- **Input source redundancy mode**—This mode uses two electrical grids, each one powering a half module within each power supply. If one power grid goes down, each power supply continues to draw power through its other half module. The available power is the amount of power by the lesser of the two grids through the power supplies.
- **Full redundancy mode**—This mode combines power supply redundancy and input source redundancy, which means that the chassis has an extra power supply and each half of each power supply is connected to one electrical grid while the other half of each power supply is connected to the other electrical grid. The available power is the lesser of the available power for power supply mode and input source mode.

Send document comments to nexus7k-docfeedback@cisco.com

This command does not require a license.

Examples

This example shows how to configure the power supply redundancy mode:

```
switch# configure t
switch(config)# power redundancy-mode redundant
```

This example shows how to disable the power supply redundancy mode:

```
switch# configure t
switch(config)# no power redundancy-mode redundant
```

Related Commands

Command	Description
show environment	Displays information about the device hardware environment.

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

reload module

To reload a module in the device, use the **reload module** command.

```
reload module slot [force-dnld]
```

Syntax Description	slot	Chassis slot number. The slot range depends on the system.
	force-dnld	(Optional) Forces the download of software to the module.

Defaults None

Command Modes Any command mode

Supported User Roles network-admin

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

Usage Guidelines You can use the **reload module** command only in the default virtual device context (VDC). To display information about the hardware on your device, use the **show hardware** command. This command does not require a license.

Examples This example shows how to reload a module:

```
switch# reload module 2
```

Related Commands	Command	Description
	show module	Displays the fabric modules in the Cisco Nexus 7000 Series switch.

Send document comments to nexus7k-docfeedback@cisco.com

show boot

To display the boot variables in the startup configuration, use the **show boot** command.

show boot

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

Command History	Release	Modification
	4.2	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to display the boot variables in the startup configuration:

```
switch# show boot
Current Boot Variables:

sup-1
kickstart variable = bootflash:/n7000-s1-kickstart.4.1.5.gbin.S1
system variable = bootflash:/n7000-s1-dk9.4.1.5.gbin.S1
sup-2
kickstart variable = bootflash:/n7000-s1-kickstart.4.1.5.gbin.S1
system variable = bootflash:/n7000-s1-dk9.4.1.5.gbin.S1
No module boot variable set

Boot Variables on next reload:

sup-1
kickstart variable = bootflash:/n7000-s1-kickstart.4.1.5.gbin.S1
system variable = bootflash:/n7000-s1-dk9.4.1.5.gbin.S1
sup-2
kickstart variable = bootflash:/n7000-s1-kickstart.4.1.5.gbin.S1
system variable = bootflash:/n7000-s1-dk9.4.1.5.gbin.S1
No module boot variable set
switch#
```

Send document comments to nexus7k-docfeedback@cisco.com

Related Commands

Command	Description
boot kickstart	Configures the boot variable for the Cisco NX-OS software kickstart image.
boot system	Configures the boot variable for the Cisco NX-OS software system image.

Send document comments to nexus7k-docfeedback@cisco.com

show cores

To display the system core dump files, use the **show cores** command.

```
show cores {vdc | vdc-all}
```

Syntax Description	vdc	Specifies all core dumps for a virtual device context (VDC).
	vdc-all	Specifies core dumps for all VDCs.

Command Modes Any command mode

Supported User Roles network-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 display the recent system core dump file:

```
switch# show cores vdc
VDC No Module-num      Instance-num  Process-name  PID      Core-create-time
-----
1      5                1            cdp        16718    May 21 15:36
switch#
```

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

Send document comments to nexus7k-docfeedback@cisco.com

show system cores

To display the core filename, use the **show system cores** command.

show system cores

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 To configure the system core filename, use the **show system cores** command.
This command does not require a license.

Examples This example shows how to display the core filename:

```
switch# show system cores
Cores are transferred to slot0:
switch#
```

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

Send document comments to nexus7k-docfeedback@cisco.com

show system redundancy

To display the system redundancy status, use the **show system redundancy** command.

show system redundancy [ha] status

Syntax Description	ha	(Optional) Displays the virtual device context (VDC) redundancy (high availability) status.
---------------------------	-----------	---

Defaults	None
-----------------	------

Command Modes	Any command mode
----------------------	------------------

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

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

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

Examples This example shows how to display the system redundancy status:

```
switch# show system redundancy status
Redundancy mode
-----
      administrative:  HA
      operational:    None

This supervisor (sup-1)
-----
      Redundancy state:  Active
      Supervisor state:  Active
      Internal state:    Active with no standby

Other supervisor (sup-2)
-----
      Redundancy state:  Not present
switch#
```

Send document comments to nexus7k-docfeedback@cisco.com

This example shows how to display the VDC redundancy status:

```
switch# show system redundancy ha status
VDC No      This supervisor                Other supervisor
-----      -
vdc 1      Active with no standby          N/A
vdc 2      Active with no standby          N/A
vdc 3      Active with no standby          N/A
vdc 4      N/A                              N/A
switch#
```

Related Commands

Command	Description
<code>system hap-reset</code>	Enables the Supervisor Reset HA policy.

Send document comments to nexus7k-docfeedback@cisco.com

show system standby manual-boot

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

show system standby manual-boot

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

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

Usage Guidelines This command does not require a license.

Examples This example shows how to display the status of the system standby manual boot feature:

```
switch(config)# show system standby manual-boot
system standby manual-boot option is disabled
switch(config)#
```

Related Commands	Command	Description
	system hap-reset	Enables the Supervisor Reset HA policy.

[Send document comments to nexus7k-docfeedback@cisco.com](mailto:nexus7k-docfeedback@cisco.com)

system cores

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

```
system cores {slot1:[path] | tftp:/server/[path]}filename
```

```
no system cores {slot1:[path] | tftp:/server/[path]}filename
```

Syntax Description	slot1	Specifies the slot0: external file system.
	<i>path</i>	(Optional) Directory path to the file. The directory names in the path are case sensitive.
	tftp	Specifies a TFTP server.
	<i>server</i>	Name or IPv4 address of the TFTP server. The server name is case sensitive.
	<i>filename</i>	Name of the core file. The name is alphanumeric, case sensitive, and has a maximum of 32 characters.

Defaults None

Command Modes Any command mode

Supported User Roles network-admin
network-operator
vdc-admin
vdc-operator

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

Usage Guidelines This command does not require a license.

Examples This example shows how to configure the destination for the system core:

```
switch# config t
switch(config)# system cores slot1:core_file
switch(config)#
```

This example shows how to disable system core logging:

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

Send document comments to nexus7k-docfeedback@cisco.com

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

Send document comments to nexus7k-docfeedback@cisco.com

system hap-reset

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

system hap-reset

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

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

Usage Guidelines You configure switchover and high availability (HA) policies for a virtual device context (VDC) when you create the VDC.

This command does not require a license.

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

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

Related Commands	Command	Description
	system no hap-reset	Disables the heartbeat checks and reverts to the factory default.

Send document comments to nexus7k-docfeedback@cisco.com

system heartbeat

To enable heartbeat checks (default) and revert to the factory default, use the **system heartbeat** command. To disable heartbeat checks, use the **no** form of this command.

system heartbeat

system no heartbeat

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

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

Usage Guidelines This command does not require a license.

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

```
switch# system heartbeat
switch#
```

This example shows how to disable the heartbeat checks:

```
switch# system no heartbeat
switch#
```

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

Send document comments to nexus7k-docfeedback@cisco.com

system no hap-reset

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

system no hap-reset

Syntax Description This command has no arguments or keywords.

Defaults Disabled

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 configure switchover and high availability (HA) policies for a VDC when you create the VDC. This command does not require a license.

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

```
switch# system no hap-reset
switch#
```

Related Commands	Command	Description
	system no standby manual-boot	Disables the system standby manual boot.

Send document comments to nexus7k-docfeedback@cisco.com

system standby manual-boot

To enable the system standby manual boot, use the **system standby manual-boot** command. To disable the system standby manual-boot option, use the **no** form of this command.

system standby manual-boot

system no standby manual-boot

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

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

Usage Guidelines This command does not require a license.

Examples This example shows how to enable the system standby manual boot:

```
switch# system standby manual-boot
system standby manual-boot option is enabled
switch#
```

Related Commands	Command	Description
	system hap-reset	Enables the Supervisor Reset HA policy.

Send document comments to nexus7k-docfeedback@cisco.com

system switchover

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

system switchover

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin

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

Usage Guidelines This command does not require a license.

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

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

Related Commands	Command	Description
	show system redundancy	Displays the system redundancy status.

Send document comments to nexus7k-docfeedback@cisco.com

system watchdog

To enable the watchdog feature, use the **system no watchdog** command. To disable the watchdog feature, use the **no** form of this command.

system watchdog

system no watchdog

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

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

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

Usage Guidelines This command does not require a license.

Examples This example shows how to enable the watchdog feature:

```
switch# system watchdog
switch#
```

This example shows how to disable the watchdog feature:

```
switch# system no watchdog
switch#
```

Related Commands	Command	Description
	system no watchdog kgdb	Prevents the system from entering the Linux KGDB debugger on a watchdog failure.
