

Managing Router Hardware Commands

Note All commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router that is introduced from Cisco IOS XR Release 6.3.2. References to earlier releases in Command History tables apply to only the Cisco NCS 5500 Series Router.

Note

- Starting with Cisco IOS XR Release 6.6.25, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 560 Series Routers.
- Starting with Cisco IOS XR Release 6.3.2, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router.
- References to releases before Cisco IOS XR Release 6.3.2 apply to only the Cisco NCS 5500 Series Router.
- Cisco IOS XR Software Release 7.0.1 specific updates are not applicable for the following variants of Cisco NCS 540 Series Routers:
  - N540-28Z4C-SYS-A
  - N540-28Z4C-SYS-D
  - N540X-16Z4G8Q2C-A
  - N540X-16Z4G8Q2C-D
  - N540X-16Z8Q2C-D
  - N540-12Z20G-SYS-A
  - N540-12Z20G-SYS-D
  - N540X-12Z16G-SYS-A
  - N540X-12Z16G-SYS-D

This module describes the managing router hardware commands on the Cisco NCS 5500 Series RouterCisco NCS 540 Series Router.

- hw-module profile npu native-mode-enable, on page 3
- hw-module profile routing role core, on page 4
- hw-module profile tcam fib v6mcast percent, on page 5
- show environment power, on page 6

hw-module profile npu native-mode-enable

To enable the native mode on Cisco NCS 5500 series modular routers having Cisco NCS 5700 line cards, use the **hw-module profile npu native-mode-enable** command in the configuration mode.

hw-module profile npu native-mode-enable

Syntax Description

This command has no keywords or arguments.

Command Default

The command is not enabled by default.

Command Modes

Global Configuration mode

Command History

Release	Modification
Release 7.0.2	This command was introduced.

Usage Guidelines

To activate the native mode, you must manually reload the line cards using the **hw-module location all reload** command in the System Admin mode.

This example shows how to enable native mode in a NCS 5700 line card:

```
Router# config
Router(config)# hw-module profile npu native-mode-enable
Router(config)# commit
```

hw-module profile routing role core

To configure the routing role of a node as a core router, use the **hw-module profile routing role core** command in XR Config mode.

hw-module profile routing role core

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR Config mode

Command History

Release	Modification
Release 7.3.2	This command was introduced.

Usage Guidelines

After configuring this command, you must reload the router for the configuration to take effect.

This example shows how to configure the routing role of a node as a core router.

```
Router# config
Router(config)# hw-module profile routing role core
Router(config)# commit
```

hw-module profile tcam fib v6mcast percent

On NL-based external TCAM, by default, multicast IPv6 routes are programmed in KAPS instead of external TCAM. The IPv6 multicast route scale is limited in KAPS. To increase the route scale, configure the routes in external TCAM. To increase the IPv6 multicast route scale in external TCAM, use the **hw-module profile tcam fib v6mcast percent** command in the global configuration mode.

hw-module profile tcam fib v6mcast percent *value*

Syntax Description

value	A number from 0 to 100 for the external TCAM scale allocation.

Command Default

No default behavior or values.

Command Modes

Global Configuration mode

Command History

Release	Modification
Release 6.6.1	This command was introduced.

Usage Guidelines

- After configurating this command, you must manually reload the line cards using the **hw-module location all reload** command in the System Admin mode.
- You must enable the **hw-module profile tcam fib ipv6 unicast percent <>** command before configuring the **hw-module profile tcam fib v6mcast percent <>** command.

Task ID

Task ID	Operations
system	read, write

This example shows how to increase the IPv6 multicast route scale in external TCAM.

```
Router# config
Router(config)# hw-module profile tcam fib v6mcast percent 24
Router(config)# commit
```

show environment power

To view the power supply details of the router, use the **show environment power** command in the System Admin EXEC VM mode.

show environment power

Syntax Description

This command has no keywords or arguments.

Command Default

No default behavior or values.

Command Modes

System Admin EXEC VM

Command History

Release	Modification
Release 6.0	This command was introduced.

Usage Guidelines

None

This example shows how to view the power supply details of the NCS 5500 router:

```
router#admin
sysadmin-vm:router#show environment power
===============================================================================
CHASSIS LEVEL POWER INFO: 0
===============================================================================
   Total output power capacity (Group 0 + Group 1) :    1100W +    1100W
   Total output power required                     :     900W
   Total power input                               :     319W
   Total power output                              :     281W

Power Group 0:
===============================================================================
   Power       Supply     ------Input----   ------Output---      Status
   Module      Type        Volts     Amps    Volts     Amps
===============================================================================
   0/PM0       1kW-AC      228.5      0.7     11.9     12.1    OK

Total of Power Group 0:        160W/  0.7A       144W/ 12.1A

Power Group 1:
===============================================================================
   Power       Supply     ------Input----   ------Output---      Status
   Module      Type        Volts     Amps    Volts     Amps
===============================================================================
   0/PM1       1kW-AC      227.0      0.7     11.9     11.5    OK

Total of Power Group 1:        159W/  0.7A       137W/ 11.5A

===============================================================================
   Location     Card Type            Power       Power       Status
                                     Allocated   Used
                                     Watts       Watts
===============================================================================
   0/RP0        NCS-5501-SE           800           -       ON
```

```
0/FT0          NCS-1RU-FAN-FW          50              -         ON
0/FT1          NCS-1RU-FAN-FW          50              -         ON
```