

Management Ethernet Interface 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 provides command line interface (CLI) commands for configuring Management Ethernet interfaces on the Cisco NCS 5500 Series RouterCisco NCS 540 Series Router.

For detailed information about Management Ethernet interfaces concepts, configuration tasks, and examples, refer to the *Interface and Hardware Component Configuration Guide for Cisco NCS 5500 Series RoutersInterface and Hardware Component Configuration Guide for Cisco NCS 540 Series RoutersInterface and Hardware Component Configuration Guide for Cisco NCS 560 Series Routers*

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duplex (Management Ethernet)

To configure duplex mode operation on a Management Ethernet interface, use the **duplex** command in interface configuration mode. To return the interface to autonegotiated duplex mode, use the **no** form of the **duplex** command.

duplex {**full** | **half**}
no duplex

Syntax Description

full	Configures the Management Ethernet interface to operate in full duplex mode.
half	Configures the Management Ethernet interface to operate in half duplex mode.

Command Default

Autonegotiates duplex operation

Command Modes

Interface configuration

Command History

Release	Modification
Release 6.0	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operations
interface	read, write

Examples

This example shows how to configure the Management Ethernet interface to operate in full duplex mode:

```
RP/0/RP0/CPU0:router(config)# interface mgmtEth 0/
RP0/CPU0/0
RP/0/RP0/CPU0:router(config-if)# duplex full
```

This example shows how to configure the Management Ethernet interface to operate in half duplex mode:

```
RP/0/RP0/CPU0:router(config)# interface mgmtEth 0/RP0/CPU0/0
RP/0/RP0/CPU0:router(config-if)# duplex half
```

This example shows how to return a Management Ethernet interface to autonegotiated duplex mode:

```
RP/0/RP0/CPU0:router(config)# interface mgmtEth 0/RP0/CPU0/0
RP/0/RP0/CPU0:router(config-if)# no duplex
```

interface MgmtEth

To enter interface configuration mode for the Management Ethernet interface, use the **interface MgmtEth** command in XR Config mode. To delete a Management Ethernet interface configuration, use the **no** form of this command.

interface MgmtEth *interface-path-id*
no interface MgmtEth *interface-path-id*

Syntax Description

interface-path-id	Physical interface or virtual interface. **Note** Use the **show interfaces** command to see a list of all interfaces currently configured on the router. For more information about the syntax for the router, use the question mark (**?**) online help function.

Command Default

No default behavior or values

Command History

Release	Modification
Release 6.0	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operations
interface	read, write

Examples

This example shows how to enter interface configuration mode for a Management Ethernet interface:

```
Router# Configure
Router(config)# interface mgmtEth 0/1/CPU0/0
Router(config-if)#
```

ipv6 address autoconfig

The **ipv6 address autoconfig** command is used to configure IPv6 addresses or prefix on the interface. This command enables IPv6 processing on the interface. To remove all manually configured IPv6 addresses from an interface, use the **no ipv6 address** command without arguments.

The IPv6 Stateless Address Auto Configuration (SLAAC) is used when a site is not particularly concerned with the exact addresses the hosts use, as long as they are unique and can be routed. IPv6 auto configuration is disabled by default. To enable IPv6 SLAAC on Management interface, use the **ipv6 address autoconfig** command on the Management interface configuration mode. To disable auto configuration on the Management interface, use the no form of the command.

ipv6 address { *[ipv6addr]* | *[ipv6-prefix/prefix length]* | **[autoconfig] }**
no ipv6 address { *[ipv6addr]* | *[ipv6-prefix/prefix length]* | **[autoconfig] }**

Syntax Description

ipv6addr	(Optional) Specify the IPv6 address.
ipv6-prefix/prefix length	(Optional) Specify the IPv6 prefix and the prefix length preceded by a slash [/].
autoconfig	(Optional) Enable IPv6 stateless address auto configuration (SLAAC) on Management interface. **Note** The **autoconfig** option is only available for Management Interfaces.

Command Default

No default behavior or values

Command Modes

Management Interface Configuration

Command History

Release	Modification
Release 6.3.1	This command was introduced.

Usage Guidelines

In the **ipv6 address** interface configuration command, you can enter the *ipv6addr* or *ipv6-prefix/prefix length* variables with the address specified in hexadecimal using 16-bit values between colons. The *prefix length* variable (preceded by a slash [/]) is a decimal value that shows how many of the high-order contiguous bits of the address comprise the prefix (the network portion of the address).

The router will automatically configure an IPv6 link-local address on the interface, and enable the interface for IPv6 processing, and trigger IPv6 Neighbor Discovery (ND) auto configuration functionality in ND. Once the Management interface is in no shut state and **ipv6 address autoconfig** configuration is enabled, you will receive Router Advertisement (RA) on Management interface and get prefix and other information.

Task ID

Task ID	Operations
interface	read, write

Examples

The following example shows how to configure the IPv6 address based on the IPv6 prefix 2001:0DB8:c18:1::/64:

```
RP/0/RP0/CPU0:router# configure
RP/0/RP0/CPU0:router(config)# interface gigabitEthernet 0/2/0/0
RP/0/RP0/CPU0:router(config-if)# ipv6 address 2001:0DB8:c18:1::/64
```

The following example shows how to enable IPv6 auto configuration on router:

```
RP/0/RP0/CPU0:router# configure
RP/0/RP0/CPU0:router(config)# interface mgmtEth 0/RSP0/CPU0/0
RP/0/RP0/CPU0:router(config-if)# ipv6 address autoconfig
```

Related Commands

Command	Description
interface MgmtEth, on page 4	Enters interface configuration mode for the Management Ethernet interface.