Management Ethernet Interface Commands

This module provides command line interface (CLI) commands for configuring Management Ethernet interfaces on the Cisco NCS 6000 Series Router.

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 5.0.0	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operations
interface	read, write

Examples

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

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

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

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

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

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

Related Commands

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

interface MgmtEth

To enter interface configuration mode for the Management Ethernet interface, use the **interface MgmtEth** command in XR configmode. 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 Modes

XR config

Command History

Release	Modification
Release 5.0.0	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operations
interface	read, write

Examples

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

```
RP/0/RP0/CPU0:router(config)# interface MgmtEth 0//CPU0/0
RP/0/RP0/CPU0:router(config-if)#
```

Related Commands

Command	Description
duplex (Management Ethernet), on page 2	Configures duplex mode operation on a Management Ethernet interface.
mac-address (Management Ethernet), on page 6	Sets the MAC layer address of a Management Ethernet interface.
speed (Management Ethernet), on page 8	Configures the speed for a Management Ethernet interface.

mac-address (Management Ethernet)

To set the MAC layer address of a Management Ethernet interface, use the **mac-address** command in interface configuration mode. To return the interface to its default MAC address, use the **no** form of the **mac-address** command.

mac-address *value1.value2.value3*

no mac-address

Syntax Description

value1	High 2 bytes of the MAC address in hexadecimal. Range is from 0 to ffff.
value2	Middle 2 bytes of the MAC address in hexadecimal. Range is from 0 to ffff.
value3	Low 2 bytes of the MAC address in hexadecimal. Range is from 0 to ffff.

Command Default

The default MAC address is read from the hardware burned-in address (BIA).

Command Modes

Interface configuration

Command History

Release	Modification
Release 5.0.0	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

The MAC address must be in the form of three 4-digit values (12 digits in dotted decimal notation).

Task ID

Task ID	Operations
interface	read, write

Examples

The following example shows how to set the MAC address of the Management Ethernet interface located at 0/ /CPU0/0:

```
RP/0/RP0/CPU0:router(config)# interface MgmtEth 0//CPU0/0
RP/0/RP0/CPU0:router(config-if)# mac-address 0001.2468.ABCD
```

Related Commands

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

speed (Management Ethernet)

To configure the speed for a Management Ethernet interface, enter the **speed** command in interface configuration mode. To return the system to autonegotiate speed, use the **no** form of the **speed** command.

speed {**10**| **100**| **1000**}

no speed

Syntax Description

10	Configures the interface to transmit at 10 Mbps.
100	Configures the interface to transmit at 100 Mbps.
1000	Configures the interface to transmit at 1000 Mbps (1 Gbps).

Command Default

Interface speed is autonegotiated.

Command Modes

Interface configuration

Command History

Release	Modification
Release 5.0.0	This command was introduced.

Usage Guidelines

Note Keep in mind that both ends of a link must have the same interface speed. A manually configured interface speed overrides any autonegotiated speed, which can prevent a link from coming up if the configured interface speed at one end of a link is different from the interface speed on the other end.

Table 1: Relationship Between duplex and speed Commands, on page 8 describes the performance of the system for different combinations of the duplex and speed modes. The specified **duplex** command configured with the specified **speed** command produces the resulting system action.

Table 1: Relationship Between duplex and speed Commands

duplex Command	speed Command	Resulting System Action
no duplex	no speed	Autonegotiates both speed and duplex modes.
no duplex	speed 1000	Forces 1000 Mbps (1 Gbps) and full duplex.

duplex Command	speed Command	Resulting System Action
no duplex	speed 100	Autonegotiates for duplex mode and forces 100 Mbps.
no duplex	speed 10	Autonegotiates for duplex mode and forces 10 Mbps.
duplex full	no speed	Forces full duplex and autonegotiates for speed.
duplex full	speed 1000	Forces 1000 Mbps (1 Gbps) and full duplex.
duplex full	speed 100	Forces 100 Mbps and full duplex.
duplex full	speed 10	Forces 10 Mbps and full duplex.
duplex half	no speed	Forces half duplex and autonegotiates for speed (10 or 100 Mbps.)
duplex half	speed 100	Forces 100 Mbps and half duplex.
duplex half	speed 10	Forces 10 Mbps and half duplex.

Task ID

Task ID	Operations
interface	read, write

Examples

The following example shows how to configure the Management Ethernet interface to transmit at one gigabit:

```
RP/0/RP0/CPU0:router(config)# interface MgmtEth 0//CPU0/0
RP/0/RP0/CPU0:router(config-if)# speed 1000
```

Related Commands

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