

Configuring Gigabit Ethernet Interfaces (CLI Procedure)

An Ethernet interface must be configured for optimal performance in a high-traffic network. EX Series switches include a factory default configuration that:

- Enables all the network interfaces on the switch
- Sets a default port mode (access)
- Sets default link settings
- Specifies a logical unit (unit 0) and assigns it to family **ethernet-switching**
- Specifies Spanning Tree Protocol (STP) and Link Layer Discovery Protocol (LLDP)

This topic describes:

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Configuring VLAN Options and Port Mode

The factory default configuration includes a default VLAN and enables interfaces for the access port mode. Access interfaces typically connect to network devices such as PCs, printers, IP telephones, and IP cameras.

If you are connecting a desktop phone or wireless access point or a security camera to a PoE port, you can configure some parameters for the PoE interface. The PoE interfaces are enabled by default. For detailed information on the PoE settings, see *Configuring PoE (CLI Procedure)*.

If you are connecting a device to other switches and to routers on the LAN, you need to assign the interface to a logical port and you need to configure the logical port as a trunk port. See *Port Role Configuration with the J-Web Interface (with CLI References)* for more information about port configuration.

To configure a Gigabit Ethernet interface or 10-Gigabit Ethernet interface for trunk port mode:

```
[edit]
user@switch#set interfaces interface-name unit logical-unit-number family
ethernet-switching port-mode trunk
```

Configuring the Link Settings

EX Series switches include a factory default configuration that enables interfaces with the following link settings:

- All the Gigabit Ethernet interfaces are set to **auto-negotiation**.
- The speed for Gigabit Ethernet interfaces is set to **auto**, allowing the interface to operate at 10m, 100m or 1g. The link operates at the highest possible speed, depending on the capabilities of the remote end.
- The flow control for Gigabit Ethernet interfaces and 10-Gigabit Ethernet interfaces is set to **enabled**.
- The link mode is set to **auto**, allowing the interface to operate as either full duplex or half duplex. The link operates as full duplex unless this mode is not supported at the remote end.
- The 10-Gigabit Ethernet interfaces (for the EX-UM-2XFP uplink module) default to **no auto-negotiation**. The default speed is 10g and the default link mode is full duplex.

To configure the link settings:

- Set link settings for a Gigabit Ethernet interface:

```
[edit]
user@switch# set interfaces ge-fpc/pic/port ether-options
```

- Set link settings for a 10-Gigabit Ethernet interface:

```
[edit]
user@switch# set interfaces xe-fpc/1/port ether-options
```



NOTE: An uplink module in an EX Series switch is always PIC 1. The 10-Gigabit Ethernet interface is available only with the EX-UM-2XFP uplink module.

The ether-options statement allows you to modify the configuration for:

- 802.3ad—Specify an aggregated Ethernet bundle. See Configuring Aggregated Ethernet Interfaces (CLI Procedure).
- auto-negotiation—Enable or disable auto-negotiation of flow control, link mode, and speed.
- flow-control—Enable or disable flow control.
- link-mode—Specify full-duplex, half-duplex, or automatic.
- speed—Specify 10m, 100m, 1g, or autonegotiation.

Configuring the IP Options

To specify an IP address for the logical unit:

```
[edit]
```

```
user@switch# set interfaces interface-name unit logical-unit-number family inet
address ip-address
```

Configuring the Interfaces on the Uplink Module in EX3200 and EX4200 Switches

By default, the interfaces on the ports on the uplink module installed in EX3200 or EX4200 switches are enabled. You can disable the interfaces on the uplink module using a CLI command.

To disable an interface on the uplink module:

```
[edit]
user@switch# set interfaces interface-name disable
```

where *interface-name* is the name of the interface you want to disable.

If an interface on the uplink module is disabled, you can enable the interface using a CLI command.

To enable an interface on the uplink module:

```
[edit]
user@switch# set interfaces interface-name enable
```

where *interface-name* is the name of the interface you want to enable.

- Related Topics**
- Configuring Gigabit Ethernet Interfaces (J-Web Procedure)
 - Monitoring Interface Status and Traffic
 - show interfaces ge-
 - show interfaces xe-
 - Understanding Interface Naming Conventions on EX Series Switches
 - Uplink Modules in EX3200 and EX4200 Switches

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