



Configure Per-Port MTU

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Restrictions for configuring per-port MTU

Several restrictions apply to configuring per-port MTU on Cisco Catalyst switches. These restrictions vary depending on the platform, interface type, and other configuration conditions.

General restrictions:

- Per-port MTU cannot be configured on the management port.
- Do not configure the per-port MTU value while traffic is flowing (e.g., during active data transmission).

Port-channel restrictions:

- Members of a port channel cannot be configured with a per-port MTU value; they derive their MTU from the port-channel MTU configuration.
- Per-port MTU can be configured on port-channel interfaces but not on the port-channel members.

Subinterface restrictions:

- Per-port MTU is not supported on subinterfaces or port-channel subinterfaces.

Layer 2 MTU restrictions:

- Ingress and egress Layer 2 MTU is derived from per-port MTU. If per-port MTU is not configured, the System MTU is used.
- On ingress ports configured with Layer 2 MTU, packets that exceed the configured MTU size are dropped.

Platform-specific restrictions:

- On Cisco Catalyst 9610 Series Supervisor 2 Module, the following restrictions are applicable:
 - If no protocol-specific MTU configuration is present, per-port MTU is used as protocol-specific MTU.

- If per-port MTU is not configured, System MTU is used as protocol-specific MTU.

Port MTU specifications for Cisco Catalyst switches

You can configure the MTU size for all interfaces on a device at the same time using the **system mtu** command. The default maximum transmission unit (MTU) size for frames received and transmitted on all interfaces is 1500 bytes. The **system mtu** command is a global command and does not allow MTU to be configured at a port level. Starting with Cisco IOS XE 17.1.1, you can configure Per-Port MTU. Per-Port MTU will support port level and port channel level MTU configuration. With Per-Port MTU you can set different MTU values for different interfaces as well as different port channel interfaces.

Per-port MTU can be configured in the range of 1500-9198 bytes.

Per-port MTU can be configured in the range of 1500-9216 bytes.

Once the Per-Port MTU value has been configured on a port, the protocol-specific MTU for that port is also changed to the Per-Port MTU value. When Per-Port MTU is configured on a port, you can still configure protocol-specific MTU on the interface in the range from 256 to Per-Port MTU value.

If the Per-Port MTU is disabled, the MTU for the port will revert to the system MTU value.

You can view the Per-Port MTU configurations on an interface using the **show interface mtu** command.

The following are expected behaviour if the Per-Port MTU configuration is changed on any interface:

- The interface flaps if the port-channel is in PAgP or LACP mode.
- The interface does not flap if the port channel is in the **on** mode.
- The interface does not flap if the interface is not a port channel.

You can disable Per-Port MTU by using the **no** form of the **mtu bytes** command in the interface configuration mode.

NOTE:

To form routing protocol adjacency, ensure port MTUs match between devices. Configure matching IP MTU or IPv6 MTU values on the interfaces of both devices.

Configure per-port MTU

Follow these steps to configure per-port MTU on an interface:

Procedure

	Command or Action	Purpose
Step 1	mtu port Example: Device# configure terminal Device(config)# interface FortyGigabitEthernet2/5/0/20	

	Command or Action	Purpose
	Device(config-if)# mtu 6666 Device(config-if)# end	

Configuration Examples for Per-Port MTU

The following displays an example for Per-Port MTU configuration on an interface:

```
Device# configure terminal
Device(config)# interface FortyGigabitEthernet2/5/0/20
Device(config-if)# mtu 6666
Device(config-if)# end
```

Verify per-port MTU

The following example illustrates how to verify the per-port MTU configuration on an interface using the **show interface mtu** command.

Procedure

	Command or Action	Purpose
Step 1	show interface mtu Example: Device# show interface mtu Port Name MTU Fo2/5/0/19 1500 Fo2/5/0/20 6666 Fo2/5/0/21 ixia_7_21 1500	

Disable per-port MTU

This example shows how to disable Per-Port MTU on an interface:

Before you begin

- Ensure you have administrative access to the device.
- Confirm the interface ID where you want to disable the per-port MTU.

Procedure

	Command or Action	Purpose
Step 1	no mtu	

	Command or Action	Purpose
	Example: Device# configure terminal Device(config)# interface FortyGigabitEthernet2/5/0/20 Device(config-if)# no mtu Device(config-if)# end	