Configuring Per-Port MTU

Restrictions for Per-Port MTU

- Per-Port MTU cannot be configured on the management port.

- Per-Port MTU cannot be configured on SVL links.

- Members of a port channel cannot be configured with Per-Port MTU, they derive their MTU from the port-channel MTU configuration.

- Per-Port MTU is not supported on subinterfaces and port-channel subinterfaces.

On Cisco Catalyst 9600 Series Supervisor 2 Module (C9600X-SUP-2), the following restrictions are applicable:

- If no protocol-specific MTU configuration is present, Per-Port MTU is used as protocol-specific MTU. In case Per-Port MTU is not configured, System MTU is used as protocol-specific MTU.

- Ingress and egress Layer 2 MTU is derived from Per-Port MTU. If Per-Port MTU is not configured, System MTU is used

- On ingress ports configured with Layer 2 MTU, if packets exceed the configured MTU size, then the packets are dropped.

- Layer 2 MTU configurations are not enforced for egress frames.

Information About Per-Port MTU

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 1500-9216 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.

Configuring Per-Port MTU

Follow these steps to change the MTU size for switched packets on a particular port of an interface:

Procedure

	Command or Action	**Purpose**
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. Enter your password, if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**interface***typeswitch-number/slot-number/port-number* **Example:** `Device(config)# int FortyGigabitEthernet2/5/0/20`	Configures the interface and enters interface configuration mode.
Step 4	**mtu***bytes* **Example:** `Device(config-if)# mtu 6666`	Configures the MTU size for a particular port on the interface.

	Command or Action	Purpose
Step 5	**end** **Example:** `Device(config-if)# end`	Exits interface configuration mode, and returns to privileged EXEC mode.

Example: Configuring Per-Port MTU

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

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

Example: Verifying Per-Port MTU

This example shows how to verify Per-Port MTU on an interface using the **show interface mtu** command:

```
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
```

Example: Disabling Per-Port MTU

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

```
Device# configure terminal
Device(config)# interface FortyGigabitEthernet2/5/0/20
Device(config-if)# no mtu
Device(config-if)# end
```

Feature History for Per-Port MTU

This table provides release and related information for features explained in this module.

These features are available on all releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Amsterdam 17.1.1	Per-Port MTU	Per-Port MTU defines the maximum transmission unit size for frames received and transmitted on a particular port or port channel. .

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