Configuring System MTU

Information about the MTU

The default maximum transmission unit (MTU) size for frames received and transmitted on all interfaces is 1500 bytes. You can increase the MTU size for all interfaces operating at 10 or 100 Mb/s by using the **system mtu** global configuration command. You can increase the MTU size to support jumbo frames on all Gigabit Ethernet interfaces by using the **system mtu jumbo** global configuration command.

Note The switch supports jumbo frames at CPU.

System MTU Guidelines

When configuring the system MTU values, follow these guidelines:

- The default maximum transmission unit (MTU) size for frames received and transmitted on all interfaces is 1500 bytes. You can increase the MTU size for all interfaces operating at 10 or 100 Mb/s by using the **system mtu** global configuration command. You can increase the MTU size to support jumbo frames on all Gigabit Ethernet interfaces by using the **system mtu jumbo** global configuration command.
- Gigabit Ethernet ports are not affected by the **system mtu** command; 10/100 ports are not affected by the **system mtu jumbo** command. If you do not configure the **system mtu jumbo** command, the setting of the **system mtu** command applies to all Gigabit Ethernet interfaces.

How to Configure MTU

Configuring the System MTU

Beginning in privileged EXEC mode, follow these steps to change the MTU size for all 10/100 or Gigabit Ethernet interfaces:

SUMMARY STEPS

1. **configure terminal**
2. **system mtu** *bytes*
3. **system mtu jumbo** *bytes*
4. **end**
5. **copy running-config startup-config**
6. **reload**
7. **show system mtu**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 2	**system mtu** *bytes* **Example:** `Switch(config)# system mtu 2500`	(Optional) Change the MTU size for all interfaces on the switch stack that are operating at 10 or 100 Mb/s. The range is 1500 to 9198 bytes; the default is 1500 bytes.
Step 3	**system mtu jumbo** *bytes* **Example:** `Switch(config)# system mtu jumbo 7500`	(Optional) Changes the MTU size for all Gigabit Ethernet interfaces on the switch or the switch stack. The range is 1500 to 9198 bytes; the default is 1500 bytes.
Step 4	**end** **Example:** `Switch(config)# end`	Returns to privileged EXEC mode.
Step 5	**copy running-config startup-config** **Example:** `Switch# copy running-config startup-config`	Saves your entries in the configuration file.
Step 6	**reload** **Example:** `Switch# reload`	Reloads the operating system.

	Command or Action	Purpose
Step 7	**show system mtu** **Example:** `Switch# show system mtu`	Verifies your settings.

Configuration Examples for System MTU

This example shows how to set the maximum packet size for a Gigabit Ethernet port to 1900 bytes:

```
Switch(config)# system mtu 1900
Switch(config)# exit
```

This example shows how to set the jumbo packet size for a Gigabit Ethernet port to 7500 bytes:

```
Switch(config)# system mtu jumbo 7500
Switch(config)# exit
```

If you enter a value that is outside the allowed range for the specific type of interface, the value is not accepted. This example shows the response when you try to set Gigabit Ethernet interfaces to an out-of-range number:

```
Switch(config)# system mtu jumbo 25000
                                    ^
% Invalid input detected at '^' marker.
```

This is an example of output from the **show system mtu** command:

```
Switch# show system mtu
Global Ethernet MTU is 1500 bytes.
```

Additional References for System MTU

Error Message Decoder

Description	Link
To help you research and resolve system error messages in this release, use the Error Message Decoder tool.	https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi

MIBs

MIB	MIBs Link
All the supported MIBs for this release.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/support

Feature Information for System MTU

Release	Modification
Cisco IOS Release 15.0(2)EX	This feature was introduced.