

Configuring System MTU

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

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.



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 Sizes

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	Enters global configuration mode.
	Example: Switch# configure terminal	
Step 2	system mtu bytes	(Optional) Change the MTU size for all interfaces on the switch stack that are operating at 10 or 100 Mb/s.
	Example: Switch(config)# system mtu 2500	The range is 1500 to 1998 bytes; the default is 1500 bytes.

	Command or Action	Purpose
Step 3	system mtu jumbo bytes	(Optional) Changes the MTU size for all Gigabit Ethernet interfaces on the switch or the switch stack.
	Example: Switch(config)# system mtu jumbo 7500	The range is 1500 to 9198 bytes; the default is 1500 bytes.
Step 4	end	Returns to privileged EXEC mode.
	Example: Switch(config)# end	
Step 5	copy running-config startup-config	Saves your entries in the configuration file.
	Example: Switch# copy running-config startup-config	
Step 6	reload	Reloads the operating system.
	Example: Switch# reload	
Step 7	show system mtu	Verifies your settings.
	Example: Switch# show system mtu	

Configuration Examples for System MTU

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

```
Switch(config)# system mtu 1900
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

МІВ	MIBs Link
All 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.	http://www.cisco.com/support
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.	

Feature Information for System MTU

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