

Configuring System MTU

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Restrictions for System MTU

When configuring the system MTU values, follow these guidelines:

- The device does not support the MTU on a per-interface basis.
- If you enter the **system mtu** *bytes* global configuration command, the command affects all the switched and routed ports on the switch.

Information About the MTU

The default maximum transmission unit (MTU) size for frames received and sent on all device interfaces is 1500 bytes.

System MTU Value Application

In a switch stack, the MTU values applied to member switches depends upon the stack configuration. The following stack configurations are supported:

The upper limit of the IP or IPv6 MTU value is based on the switch or switch stack configuration and refers to the currently applied system MTU or the system jumbo MTU value. For more information about setting the MTU sizes, see the **system mtu** global configuration command in the command reference for this release.

How to Configure MTU

Configuring the System MTU

Follow these steps to change the MTU size for switched packets:

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- 3. system mtu bytes
- 4. end
- 5. copy running-config startup-config
- 6. show system mtu

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	• Enter your password if prompted.
	Device> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 3	system mtu bytes	(Optional) Changes the MTU size for all Gigabit Ethernet
	Example:	and 10-Gigabit Ethernet interfaces.
	Device(config)# system mtu 1900	
Step 4	end	Returns to privileged EXEC mode.
	Example:	
	Device(config)# end	
Step 5	copy running-config startup-config	Saves your entries in the configuration file.
	Example:	
	Device# copy running-config startup-config	
Step 6	show system mtu	Verifies your settings.
	Example:	
	Device# show system mtu	

Configuring Protocol-Specific MTU

To override system MTU values on routed interfaces, configure protocol-specific MTU under each routed interface.

Beginning in privileged EXEC mode, follow these steps to change the MTU size for routed ports:

SUMMARY STEPS

- 1. configure terminal
- 2. interface interface
- 3. ip mtu bytes
- 4. ipv6 mtu bytes
- 5. end
- 6. copy running-config startup-config
- 7. show system mtu

DETAILED STEPS

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	interface interface	Enters interface configuration mode.
	Example:	
	Device(config)# interface gigabitethernet0/0	
Step 3	ip mtu bytes	Changes the IPv4 MTU size
	Example:	
	Device(config-if)# ip mtu 68	
Step 4	ipv6 mtu bytes	(Optional) Changes the IPv6 MTU size.
	Example:	
	Device(config-if)# ipv6 mtu 1280	
Step 5	end	Returns to privileged EXEC mode.
	Example:	
	Device(config-if)# end	
Step 6	copy running-config startup-config	Saves your entries in the configuration file.
	Example:	
	Device# copy running-config startup-config	
Step 7	show system mtu	Verifies your settings.
	Example:	
	Device# show system mtu	

Configuration Examples for System MTU

Example: Configuring Protocol-Specific MTU

Device# configure terminal
Device(config)# interface gigabitethernet 0/0
Device(config-if)# ip mtu 900
Device(config-if)# ipv6 mtu 1286
Device(config-if)# end

Example: Configuring the System MTU

Device# configure terminal
Device(config)# system mtu 1600
Device(config)# exit

Additional References for System MTU

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.	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 XE 3.3SE	This feature was introduced.
Cisco IOS XE 3.3SE	

Feature Information for System MTU