



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.

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:

This table shows how the MTU values are applied.

Table 1: MTU Values

Configuration	system mtu command	ip mtu command	ipv6 mtu command
Standalone switch or switch stack	You can enter the system mtu command on a switch or switch stack, but system MTU value does not take effect on the switch. It affects the Fast Ethernet ports. The range is from 1500 to 9198 bytes.	Use the ip mtu bytes command. The range is from 832 up to 1500 bytes. Note The IP MTU value is the applied value, not the configured value.	Use the ipv6 mtu bytes command. The range is from 1280 to the system jumbo MTU value (in bytes). Note The IPv6 MTU value is the applied value, not the configured value.

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 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 Sizes

Configuring the System MTU

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

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.

	Command or Action	Purpose
Step 3	system mtu bytes Example: Device(config)# system mtu 1900	(Optional) Changes the MTU size for all Gigabit Ethernet and 10-Gigabit Ethernet interfaces.
Step 4	end Example: Device(config)# end	Returns to privileged EXEC mode.
Step 5	copy running-config startup-config Example: Device# copy running-config startup-config	Saves your entries in the configuration file.
Step 6	show system mtu Example: Device# show system mtu	Verifies your settings.

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:

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	interface interface Example: Device(config)# interface gigabitethernet0/0	Enters interface configuration mode.
Step 3	ip mtu bytes Example: Device(config-if)# ip mtu 68	Changes the IPv4 MTU size
Step 4	ipv6 mtu bytes Example: Device(config-if)# ipv6 mtu 1280	(Optional) Changes the IPv6 MTU size.

	Command or Action	Purpose
Step 5	end Example: Device(config-if)# end	Returns to privileged EXEC mode.
Step 6	copy running-config startup-config Example: Device# copy running-config startup-config	Saves your entries in the configuration file.
Step 7	show system mtu Example: Device# show system mtu	Verifies your settings.

Configuration Examples for System MTU

Example: Configuring Protocol-Specific MTU

```
Device# configure terminal
Device(config)# interface gigabitethernet 0/1
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

Related Documents

Related Topic	Document Title
For complete syntax and usage information for the commands used in this chapter.	See the <i>Interface and Hardware Commands</i> section in the <i>Command Reference (Catalyst 9300 Series Switches)</i>

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
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>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.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	http://www.cisco.com/support

Feature Information for System MTU

Release	Modification
Cisco IOS XE Everest 16.5.1a	This feature was introduced.

