



## 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:

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 Sizes

### Configuring the System MTU

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

#### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Device> <code>enable</code>	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Device# <code>configure terminal</code>	Enters global configuration mode.
<b>Step 3</b>	<b>system mtu bytes</b> <b>Example:</b> Device(config)# <code>system mtu 1900</code>	(Optional) Changes the MTU size for all Gigabit Ethernet and 10-Gigabit Ethernet interfaces.
<b>Step 4</b>	<b>end</b> <b>Example:</b> Device(config)# <code>end</code>	Returns to privileged EXEC mode.
<b>Step 5</b>	<b>copy running-config startup-config</b> <b>Example:</b> Device# <code>copy running-config startup-config</code>	Saves your entries in the configuration file.
<b>Step 6</b>	<b>show system mtu</b> <b>Example:</b> Device# <code>show system mtu</code>	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
<b>Step 1</b>	<b>configure terminal</b> <b>Example:</b> Device# <code>configure terminal</code>	Enters global configuration mode.
<b>Step 2</b>	<b>interface <i>interface</i></b> <b>Example:</b> Device(config)# <code>interface gigabitethernet0/0</code>	Enters interface configuration mode.
<b>Step 3</b>	<b>ip mtu <i>bytes</i></b> <b>Example:</b> Device(config-if)# <code>ip mtu 68</code>	Changes the IPv4 MTU size
<b>Step 4</b>	<b>ipv6 mtu <i>bytes</i></b> <b>Example:</b> Device(config-if)# <code>ipv6 mtu 1280</code>	(Optional) Changes the IPv6 MTU size.
<b>Step 5</b>	<b>end</b> <b>Example:</b> Device(config-if)# <code>end</code>	Returns to privileged EXEC mode.
<b>Step 6</b>	<b>copy running-config startup-config</b> <b>Example:</b> Device# <code>copy running-config startup-config</code>	Saves your entries in the configuration file.
<b>Step 7</b>	<b>show system mtu</b> <b>Example:</b> Device# <code>show system mtu</code>	Verifies your settings.

# 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 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: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

### 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>	<a href="http://www.cisco.com/support">http://www.cisco.com/support</a>

## Feature Information for System MTU

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

