

## **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 <a href="http://www.cisco.com/go/cfn">http://www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

## **Restrictions for System MTU**

When configuring the system MTU values, follow these guidelines:

- The switch does not support the MTU on a per-interface basis.
- If you enter the **system mtu** *bytes* global configuration command, the command does not take effect on the switch. This command only affects the system MTU size on Fast Ethernet switch ports.

### **Related Topics**

Configuring the System MTU, on page 2

### 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.

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.

### **Related Topics**

Configuring the System MTU, on page 2

### **System MTU Values**

The following MTU values can be configured:

### **Related Topics**

Configuring the System MTU, on page 2

## **How to Configure MTU**

### Configuring the System MTU

Follow these steps to change the MTU size for switchedand routed packets:

#### **SUMMARY STEPS**

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

#### **DETAILED STEPS**

|        | Command or Action          | Purpose                            |  |
|--------|----------------------------|------------------------------------|--|
| Step 1 | enable                     | Enables privileged EXEC mode.      |  |
|        | Example:                   | • Enter your password if prompted. |  |
|        | Switch> enable             |                                    |  |
| Step 2 | configure terminal         | Enters global configuration mode.  |  |
|        | Example:                   |                                    |  |
|        | Switch# configure terminal |                                    |  |

|        | Command or Action                              | Purpose   |  |
|--------|--|---|--|
| Step 3 | system mtu bytes  Example:                     | (Optional) Changes the MTU size for all Fast Ethernet interfaces.                               |  |
|        | Switch(config)# system mtu 1900                | The range is 1500 to 1998 bytes; the default is 1500 bytes.                                     |  |
| Step 4 | system mtu jumbo bytes                         | (Optional) Changes the MTU size for all Gigabit Ethernet  |  |
|        | Example: Switch(config)# system mtu jumbo 7500 | and 10-Gigabit Ethernet interfaces. The range is 1500 to 9000 bytes; the default is 1500 bytes. |  |
| Step 5 | end  | Returns to privileged EXEC mode.  |  |
|        | Example:                                       |   |  |
|        | Switch(config)# end                            |   |  |
| Step 6 | copy running-config startup-config             | Saves your entries in the configuration file.   |  |
|        | Example:                                       |   |  |
|        | Switch# copy running-config startup-config     |   |  |
| Step 7 | reload   | Reloads the operating system.   |  |
|        | Example:                                       |   |  |
|        | Switch# reload                                 |   |  |
| Step 8 | show system mtu                                | Verifies your settings.   |  |
|        | Example:                                       |   |  |
|        | Switch# show system mtu                        |   |  |

### **Related Topics**

Information about the MTU, on page 1 System MTU Values, on page 2 Restrictions for System MTU, on page 1

## **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:

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.   | 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.  |                              |