



System Image and Microcode Commands

This chapter provides detailed descriptions of the commands used to load and copy system images and microcode images. System images contain the system software. Microcode images contain microcode to be downloaded to various hardware devices.

For configuration information and examples, refer to the “Loading and Maintaining System Images and Microcode” chapter in the Release 12.1 *Cisco IOS Configuration Fundamentals Configuration Guide*.

Flash Memory File System Types

Cisco platforms use one of three different Flash memory file system types. Some commands are supported on only one or two file system types. This chapter notes commands that are not supported on all file system types.

Refer to Table 25 to determine which Flash memory file system type your platform uses.

Table 25 *Flash Memory File System Types*

Type	Platforms
Class A	Cisco 7000 family, C12000, LS1010
Class B	Cisco 1003, Cisco 1004, Cisco 1005, Cisco 2500 series, Cisco 3600 series, Cisco 4000 series, Cisco AS5200
Class C	Cisco MC3810, disk0 of SC3640

Replaced Commands

Commands in this chapter that have been replaced by new commands continue to perform their normal functions in the current release but are no longer documented. Support for these commands will cease in a future release.

Table 26 maps the old commands to their replacements.

Table 26 *Old Commands Mapped to New Commands*

Old Command	New Command
copy erase flash	erase flash: (Class B Flash file systems only) format (Class A and C Flash file systems only)
copy verify	verify
copy xmodem	xmodem
copy ymodem	xmodem -y
copy verify bootflash	verify bootflash:
copy verify flash	verify flash:
show flh-log	more flh: logfile
verify bootflash	verify bootflash:
verify flash	verify flash:

copy erase flash

The **erase flash:** command replaces the **copy erase flash** command. Refer to the description of the **erase** command for further details.

copy verify

The **verify** command replaces the **copy verify** command. Refer to the description of the **verify** command for further information.

copy verify bootflash

The **verify bootflash:** command replaces the **copy verify bootflash** command. Refer to the description of the **verify** command for further information.

copy verify flash

The **verify flash:** command replaces the **copy verify flash** command. Refer to the description of the **verify** command for further information.

copy xmodem:

To copy a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Xmodem protocol, use the **copy xmodem: EXEC** command.

copy xmodem: *flash-filesystem:*

Syntax Description	<i>flash-filesystem:</i> Destination of the copied file.						
Command Modes	EXEC						
Command History	<table border="1"> <thead> <tr> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Release</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Modification</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">11.2 P</td> <td style="border-bottom: 1px solid black;">This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	11.2 P	This command was introduced.		
Release	Modification						
11.2 P	This command was introduced.						
Usage Guidelines	<p>This command is a form of the copy command. The copy xmodem: and copy xmodem commands are identical. Refer to the description of the copy command for more information.</p> <p>Copying a file using FTP, rcp, or TFTP is much faster than copying a file using Xmodem. Use the copy xmodem: command only if you do not have access to an FTP, TFTP, or rcp server.</p> <p>This copy operation is performed through the console or AUX port. The AUX port, which supports hardware flow control, is recommended.</p> <p>No output is displayed on the port over which the transfer is occurring. You can use the logging buffered command to log all router messages sent to the console port during the file transfer.</p>						
Examples	<p>The following example initiates a file transfer from a local or remote computer to the router's internal Flash memory using the Xmodem protocol:</p> <pre>copy xmodem: flash:</pre>						
Related Commands	<table border="1"> <thead> <tr> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Command</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Description</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">copy</td> <td style="border-bottom: 1px solid black;">Copies any file from a source to a destination.</td> </tr> <tr> <td style="border-bottom: 1px solid black;">copy ymodem:</td> <td style="border-bottom: 1px solid black;">Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol.</td> </tr> </tbody> </table>	Command	Description	copy	Copies any file from a source to a destination.	copy ymodem:	Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol.
Command	Description						
copy	Copies any file from a source to a destination.						
copy ymodem:	Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol.						

copy ymodem:

To copy a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol, use the **copy ymodem: EXEC** command.

copy ymodem: *flash-filesystem:*

Syntax Description	<i>flash-filesystem:</i>	Destination of the copied file.
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Command Modes	EXEC
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Command History	Release	Modification
	11.2 P	This command was introduced.

Usage Guidelines The **copy ymodem:** and **copy ymodem** commands are identical. Refer to the description of the **copy** command for more information.

Copying a file using FTP, rcp, or TFTP is much faster than copying a file using Ymodem. Use the **copy ymodem:** command only if you do not have access to an FTP, TFTP, or rcp server.

This copy operation is performed through the console or AUX port. The AUX port, which supports hardware flow control, is recommended.

No output is displayed on the port over which the transfer is occurring. You can use the **logging buffered** command to log all router messages sent to the console port during the file transfer.

Examples The following example initiates a file transfer from a local or remote computer to the router's internal Flash memory using the Ymodem protocol:

```
copy ymodem: flash:
```

Related Commands	Command	Description
	copy xmodem:	Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Xmodem protocol.

erase flash:

The **erase flash:** and **erase flash** commands are identical. Refer to the **erase** command for further details.

microcode (7000/7500)

To specify the location of the microcode that you want to download from Flash memory into the writable control store (WCS) on Cisco 7000 series (including RSP based routers) or Cisco 7500 series routers, use the **microcode** global configuration command. Use the **no** form of this command to load the microcode bundled with the system image.

microcode interface {*flash-filesystem:filename* [*slot*] | **rom** | **system** [*slot*]}

no microcode interface {*flash-filesystem:filename* [*slot*] | **rom** | **system** [*slot*]}

Syntax Description	
<i>interface</i>	One of the following interface processor names: aip , cip , eip , feip , fip , fsip , hip , mip , sip , sp , ssp , trip , vip , or vip2 .
<i>flash-filesystem:</i>	Flash file system. The colon is required. Valid file systems include bootflash , slot0 , and slot1 . Slave devices such as slaveslot0 are invalid. The slave's file system is not available during microcode reloads.
<i>filename</i>	Name of the microcode file.
<i>slot</i>	(Optional) Number of the slot. Range is 0 to 15.
rom	If rom is specified, the router loads from the onboard ROM microcode.
system	If system is specified, the router loads the microcode from the microcode bundled into the system image you are running for that interface type.

Defaults The default is to load from the microcode bundled in the system image.

Command Modes Global configuration

Command History	Release	Modification
	10.3	This command was introduced.

Usage Guidelines When using HSA for simple hardware backup, ensure that the master and slave RSP card contain the same microcode image in the same location when the router is to load the interface processor microcode from a Flash file system. Thus, if the slave RSP becomes the master, it will be able to find the microcode image and download it to the interface processor.

If you do not use the **microcode reload** command after using the **microcode** command, the **microcode reload** command will be written to the configuration file automatically.

Examples

In the following example, all FIP cards will be loaded with the microcode found in Flash memory file `fp.v141-7` when the system is booted, when a card is inserted or removed, or when the **microcode reload** global configuration command is issued. The configuration is then written to the startup configuration file.

```
Router(config)# microcode fip slot0:fip.v141-7
Router(config)# end
Router# copy system:running-config nvram:startup-config
```

Related Commands

Command	Description
more flh:logfile	Views the system console output generated during the Flash load helper operation.

microcode (7200)

To configure a default override for the microcode that is downloaded to the hardware on a Cisco 7200 series router, use the **microcode** global configuration command. Use the **no** form of this command to revert to the default microcode for the current running version of the Cisco IOS software.

microcode { **ecpa** | **pcpa** } *location*

no microcode { **ecpa** | **pcpa** }

Syntax Description

ecpa	ESCON Channel Port Adapter (CPA) interface
pcpa	Parallel CPA interface
<i>location</i>	Location of microcode, including the device and filename.

Defaults

If the default or **no** form of the command is specified, the driver uses the default microcode for the current running version of the Cisco IOS software.

Command Modes

Global configuration

Command History

Release	Modification
11.3(3)T	This command was introduced.

Usage Guidelines

If there are any default overrides when the configuration is written, then the **microcode reload** command will be written to the configuration automatically. This action enables the configured microcode to be downloaded at system startup.

The CPA microcode image is preloaded on Flash memory cards for Cisco 7200-series routers for Cisco IOS Release 11.3(3)T and later. You may be required to copy a new image to Flash memory when a new microcode image becomes available.

For more information on the Channel Port Adapter (CPA) configuration and maintenance, see the "Configuring Cisco Mainframe Channel Connection Adapters" chapter in the *Cisco IOS Bridging and IBM Networking Configuration Guide*.

Examples

The following example instructs the Cisco IOS software to load the microcode from an individual microcode image that is stored as a file on the flash card inserted in flash card slot0:

```
microcode ecpa slot0:xcpa26-1
```

Related Commands	Command	Description
	microcode reload (7200)	Resets and reloads the specified hardware in a Cisco 7200 series router.
	show microcode	Displays microcode information.

microcode (12000)

To load a Cisco IOS software image on a line card from Flash memory or the GRP card on a Cisco 12000 series Gigabit Switch Router, use the **microcode** global configuration command. To load the microcode bundled with the GRP system image, use the **no** form of this command.

```
microcode {oc12-atm | oc12-pos | oc3-pos4} {flash file-id [slot] | system [slot]}
```

```
no microcode {oc12-atm | oc12-pos | oc3-pos4} [flash file-id [slot] | system [slot]]
```

Syntax Description

oc12-atm oc12-pos oc3-pos4	(Required) Interface name.
flash	Loads the image from the Flash file system.
<i>file-id</i>	Specifies the device and filename of the image file to download from Flash memory. A colon (:) must separate the device and filename (for example, slot0:gsr-p-mz). Valid devices include: <ul style="list-style-type: none"> • bootflash:—Internal Flash memory. • slot0:—First PCMCIA slot. • slot1:—Second PCMCIA slot.
<i>slot</i>	(Optional) Slot number of the line card that you want to copy the software image to. Slot numbers range from 0 to 11 for the Cisco 12012 and 0 to 7 for the Cisco 12008. If you do not specify a slot number, the Cisco IOS software image is downloaded on all line cards.
system	Loads the image from the software image on the GRP card.

Defaults

The default is to load the image from the GRP card (**system**).

Command Modes

Global configuration

Command History

Release	Modification
11.2 GS	This command was introduced for Cisco 12000 series Gigabit Switch Routers.

Usage Guidelines

.In addition to the Cisco IOS image that resides on the GRP card, each line card on a Cisco 12000 series has a Cisco IOS image. When the router is reloaded, the specified image is loaded onto the GRP card and then automatically downloaded to all the line cards.

Normally, you want the same Cisco IOS image on the GRP card and all line cards. However, if you want to upgrade a line card with a new version of microcode for testing or to fix a defect, you might need to load a Cisco IOS image that is different from the one on the line card. Additionally, you might need to load a new image on the line card to work around a problem that is affecting only one of the line cards.

To load a Cisco IOS image on a line card, first use the **copy tftp** command to download the Cisco IOS image to a slot on one of the PCMCIA Flash memory cards. Then use the **microcode** command to download the image to the line card followed by the **microcode reload** command to start the image. Immediately after you enter the **microcode reload** command and press **Return**, the system reloads all microcode. Global configuration mode remains enabled. After the reloading is complete, enter the **exit** command to return to the EXEC system prompt

To verify that the correct image is running on the line card, use the **execute-on slot slot show version** command.

For additional information on GSR configuration, see the “Cisco 12000 Series Gigabit Switch Routers” Feature Module documentation on CCO at <http://www.cisco.com/univercd/cc/td/doc/product/software/ios112/ios112p/gsr/c12012.htm>.

Examples

In the following example, the Cisco IOS software image in slot 0: is downloaded to the line card in slot 10. This software image is used when the system is booted, a line card is inserted or removed, or the **microcode reload** global configuration command is issued.

To verify that the correct version is loaded, use the **execute-on slot 10 show version** command.

```
microcode oc3-POS-4 flash slot0:fip.v141-7 10
microcode reload 10
```

Related Commands

Command	Description
microcode reload (12000)	Reloads microcode on 12000 series GSRs.

microcode reload (7000/7500)

To reload the processor card on the Cisco 7000 series with RSP7000 or Cisco 7500 series, use the **microcode reload** global configuration command.

microcode reload

Syntax Description This command has no arguments or keywords.

Command Modes Global configuration

Command History	Release	Modification
	10.3	This command was introduced for Cisco 7500 series routers.

Usage Guidelines This command reloads the microcode without rebooting the router. Immediately after you enter the microcode reload command and press Return (Enter), the system reloads all microcode. Global configuration mode remains enabled.



Note

If you modify the system configuration to load a microcode image, the **microcode reload** command will be written to the configuration file automatically following the use of a **microcode** command. This action enables the configured microcode to be downloaded at system startup.

Examples In the following example, all controllers are reset, and the microcode specified in the current configuration is loaded:

```
microcode reload
```

Related Commands	Command	Description
	microcode (7000/7500)	Specifies the location where microcode should be loaded from when the microcode reload command is executed on RSP based routers.

microcode reload (7200)

To reload the Cisco IOS microcode image on a CPA card in the Cisco 7200 series router, use the **microcode reload** command in privileged EXEC configuration mode.

microcode reload { **all** | **ecpa** [slot slot#] | **pcpa** [slot slot#] }

Syntax Description	all	Resets and reloads all hardware types that support downloadable microcode.
	ecpa	Resets and reloads only those slots that contain hardware type ecpa .
	pcpa	Resets and reloads only those slots that contain hardware type pcpa .
	slot slot#	(Optional) Resets and reloads only the slot specified, and only if it contains the hardware specified.
Defaults	No default behavior or values.	
Command Modes	Privileged EXEC	
Command History	Release	Modification
	11.3(3)T	This command was introduced.
Usage Guidelines	<p>Hardware types that do not support downloadable microcode are unaffected by the microcode reload all command.</p> <p>You will be prompted for confirmation before the microcode reload command is executed.</p>	
Examples	<p>The following example reloads the ESCON CPA microcode in slot 5 with the currently configured microcode:</p> <pre>microcode reload ecpa slot 5</pre>	
Related Commands	Command	Description
	microcode (7200)	Configures a default override for the microcode that is downloaded to the hardware on a Cisco 7200 series router.
	show microcode	Displays the microcode bundled into a Cisco 7000 series with RSP7000, Cisco 7200 series, or Cisco 7500 series system.

microcode reload (12000)

To reload the Cisco IOS image from a line card on Cisco 12000 series routers, use the **microcode reload** global configuration command.

microcode reload [*slot-number*]

Syntax Description	<i>slot-number</i>	(Optional) Slot number of the line card that you want to reload the Cisco IOS software image on. Slot numbers range from 0 to 11 for the Cisco 12012 and 0 to 7 for the Cisco 12008. If you do not specify a slot number, the Cisco IOS software image is reloaded on all line cards.
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Command Modes	Global configuration
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Command History	Release	Modification
	11.2 GS	This command was introduced for Cisco 12000 series GSRs.

Usage Guidelines

In addition to the Cisco IOS image that resides on the GRP card, each line card on Cisco 12000 series routers has a Cisco IOS image. When the router is reloaded, the specified Cisco IOS image is loaded onto the GRP card and automatically downloaded to all the line cards.

Normally, you want the same Cisco IOS image on the GRP card and all line cards. However, if you want to upgrade a line card with a new version of microcode for testing or to fix a defect, you might need to load a different Cisco IOS image. Additionally, you might need to load a new image on the line card to work around a problem affecting only one of the line cards.

To load a Cisco IOS image on a line card, first use the **copy tftp** command to download the Cisco IOS image to a slot on one of the PCMCIA Flash memory cards. Then use the **microcode** command to download the image to the line card, followed by the **microcode reload** command to start the image. To verify that the correct image is running on the line card, use the **execute-on slot slot show version** command.

For additional information on GSR configuration, refer to the “Observing System Startup and Performing a Basic Configuration” chapter in the Cisco 12000 series installation and configuration guides.

The **microcode reload (12000)** command allows you to issue another command immediately.



Note

Issuing a **microcode reload** command on any of the line cards in a Cisco 12000 GSR immediately returns the console command prompt. This allows you to issue a subsequent command immediately to the reloading line card. However, any commands entered at this time will not execute, and often no indication will be given that such a command failed to run. Please verify the microcode has reloaded successfully before issuing new commands.

Examples

In the following example, the Cisco IOS software is reloaded on the line card in slot 10:

```
microcode reload 10
```

Related Commands

Command	Description
microcode (7000/7500) (12000)	Loads a Cisco IOS software image on a line card from Flash memory or the GRP card on a Cisco 12000 series Gigabit Switch Router.

more fh:logfile

To view the system console output generated during the Flash load helper operation, use the **more fh:logfile** privileged EXEC command.

more fh:logfile

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Release	Modification
	11.3 AA	This command was introduced.

Usage Guidelines If you are a remote Telnet user performing the Flash upgrade without a console connection, this command allows you to retrieve console output when your Telnet connection has terminated due to the switch to the ROM image. The output indicates what happened during the download, and is particularly useful if the download fails.

This command is a form of the **more** command. Refer to the **more** command for details.

Examples

The following is sample output from the **more flh:logfile** command:

```
Router# more flh:logfile

%FLH: abc/igs-kf.914 from 172.16.1.111 to flash...

System flash directory:
File Length Name/status
  1  2251320 abc/igs-kf.914

[2251384 bytes used, 1942920 available, 4194304 total]
Accessing file 'abc/igs-kf.914' on 172.16.1.111...
Loading from 172.16.13.111:

Erasing device..... erased
Loading from 172.16.13.111:
- [OK -
2251320/4194304 bytes]

Verifying checksum... OK (0x97FA)
Flash copy took 79292 msecs
%FLH: Re-booting system after download
Loading abc/igs-kf.914 at 0x3000040, size = 2251320 bytes [OK]

F3: 2183364+67924+259584 at 0x3000060
```

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Cisco Internetwork Operating System Software
Cisco IOS (tm) GS Software (GS7), Version 11.0
Copyright (c) 1986-1995 by cisco Systems, Inc.
Compiled Tue 06-Dec-94 14:01 by smith
Image text-base: 0x00001000, data-base: 0x005A9C94

cisco 2500 (68030) processor (revision 0x00) with 4092K/2048K bytes of memory.

Processor board serial number 00000000
DDN X.25 software, Version 2.0, NET2 and BFE compliant.
ISDN software, Version 1.0.
Bridging software.
Enterprise software set supported. (0x0)
1 Ethernet/IEEE 802.3 interface.
2 Serial network interfaces.
--More--

1 ISDN Basic Rate interface.
32K bytes of non-volatile configuration memory.

4096K bytes of processor board System flash (Read ONLY)

■ more fh:logfile

Related Commands	Command	Description
	more	Displays a file, use the more EXEC command.

show flh-log

The **more flh:logfile** command replaces the **show flh-log** command. Refer to the **more flh:logfile** command for more information.

show microcode

To display microcode image information available on line cards, use the **show microcode EXEC** command.

show microcode

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	10.0	This command was introduced.

Examples The following is sample output from the **show microcode** command:

```
Router# show microcode

Microcode bundled in system

Card      Microcode  Target Hardware  Description
Type      Version    Version          -----
-----
SP        2.3        11.x             SP version 2.3
EIP       1.1        1.x              EIP version 1.1
TRIP     1.2        1.x              TRIP version 1.2
FIP       1.4        2.x              FIP version 1.4
HIP       1.1        1.x              HIP version 1.1
SIP       1.1        1.x              SIP version 1.1
FSIP     1.1        1.x              FSIP version 1.1
```

In the following example for the Cisco 7200 series router, the output from the **show microcode** command lists the hardware types that support microcode download. For each type, the default microcode image name is displayed. If there is a configured default override, that name is displayed as well:

```
router#show microcode
Microcode images for downloadable hardware
HW Type          Microcode image names
-----
ecpa      default      slot0:xcpa26-0
          configured slot0:xcpa26-2
pcpa      default      slot0:xcpa26-4
```

Related Commands	Command	Description
	microcode (7000/7500) (7000)	Specifies where microcode should be loaded from on Cisco 7500/7000RSP routers.
	microcode (7200)	Configures a default override for the microcode that is downloaded to the hardware on a Cisco 7200 series router.

verify bootflash:

Either of the identical **verify bootflash:** or **verify bootflash** commands replaces the **copy verify bootflash** command. Refer to the **verify** command for more information.

verify flash:

Either of the identical **verify flash:** or **verify flash** commands replaces the **copy verify flash** command. Refer to the **verify** command for more information.

xmodem

To copy a Cisco IOS image to a router using the ROM monitor and the Xmodem or Ymodem protocol, use the **xmodem** ROM monitor command.

```
xmodem [-c] [-y] [-e] [-f] [-r] [-x] [-s data-rate] [filename]
```

Syntax Description	
-c	(Optional) CRC-16 checksumming, which is more sophisticated and thorough than standard checksumming.
-y	(Optional) Uses Ymodem protocol for higher throughput.
-e	(Optional) Erases the first partition in Flash memory before starting the download. This option is only valid for the Cisco 1600.
-f	(Optional) Erases all of Flash memory before starting the download. This option is only valid for the Cisco 1600.
-r	(Optional) Downloads the file to DRAM. The default is Flash memory.
-x	(Optional) Do not execute Cisco IOS image on completion of the download.
-s <i>data-rate</i>	(Optional) Sets the console port's data rate during file transfer. Values are 1200, 2400, 4800, 9600, 19200, 38400, and 115200 bps. The default rate is specified in the configuration register. This option is only valid for the Cisco 1600 series.
<i>filename</i>	(Optional) Filename to copy. This argument is ignored when -r is specified, because only one file can be copied to DRAM. On the Cisco 1600 series, files are loaded to the ROM for execution.

Defaults Xmodem protocol with 8-bit CRC, file downloaded into Flash memory and executed on completion.

Command Modes ROM monitor

Command History	Release	Modification
	11.2 P	This command was introduced.

Usage Guidelines The Cisco 3600 series does not support XBOOT functionality. If your Cisco IOS image is erased or damaged, you cannot load a new image over the network.

Use the **xmodem** ROM monitor command to download a new system image to your router from a local personal computer (such as a PC, Mac, or UNIX workstation), or a remote computer over a modem connection, to the router's console port. The computer must have a terminal emulation application that supports these protocols.

Cisco 3600 series

Your router must have enough DRAM to hold the file being transferred, even if you are copying to Flash memory. The image is copied to the first file in internal Flash memory. Any existing files in Flash memory are erased. There is no support for partitions or copying as a second file.

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If you include the **-r** option, your router must have enough DRAM to hold the file being transferred. To run from Flash, an image must be positioned as the first file in Flash memory. If you are copying a new image to boot from Flash, erase all existing files first.

**Caution**

A modem connection from the telephone network to your console port introduces security issues that you should consider before enabling the connection. For example, remote users can dial into your modem and access the router's configuration settings.

**Note**

If the file to be downloaded is not a valid router image, the copy operation is automatically terminated.

Examples

The following example uses the **xmodem -c filename** ROM monitor command to copy the file `new-ios-image` from a remote or local computer:

```
rommon > xmodem -c new-ios-image
Do not start the sending program yet...
      File size           Checksum   File name
1738244 bytes (0x1a8604)  0xdd25  george-admin/c3600-i-mz
```

```
WARNING: All existing data in bootflash will be lost!
Invoke this application only for disaster recovery.
Do you wish to continue? y/n [n]: yes
Ready to receive file new-ios-image ...
```

Related Commands

Command	Description
copy xmodem:	Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol.
copy ymodem:	Copies a Cisco IOS image from a local or remote computer (such as a PC, Macintosh, or UNIX workstation) to Flash memory on a Cisco 3600 series router using the Ymodem protocol.