

## download

Use the **download** command to copy a software image from a specified host to the Flash memory of a designated module.

**download** *host file* [*mod\_num*]

**download serial** [*mod\_num*]

### Syntax Description

<i>host</i>	Name or IP address of host.
<i>file</i>	Name of file to be downloaded.
<i>mod_num</i>	(Optional) Number of the module to receive downloaded image.
<b>serial</b>	Keyword to specify download through a serial port.

### Default

If a module number is not specified, the image is downloaded to all modules for which the image is valid.

### Command Type

Switch command.

### Command Mode

Privileged.

### Usage Guidelines

This command is not supported by the Catalyst 4000 and 2948G series switches.

The Catalyst 5000, 2926G, and 2926 series switches support two ways to download new code to the processors: TFTP network download through any network port and Kermit serial download through the EIA/TIA-232 console port. Only the first applies to the ATM module. The ATM module has processors that will require field upgrades.

The **download** command downloads code to the module Flash memory. Catalyst 5000, 2926G, and 2926 series software rejects an image if it is not a valid image for the module.

When downloading to the ATM module, the supervisor module acts as a TFTP gateway, forwarding TFTP packets to the ATM module through an in-band IPC method.

To download a software image for the RSM, use the **session** command to access the RSM prompt where you can enter the **download** command to download the software.

The **download serial** command uses the Kermit protocol through the serial EIA/TIA-232 console port. The **download serial** command is not allowed from a Telnet session.

This command is not supported by the three-port Gigabit Ethernet switching module (WS-X5403).

Entering the **download** command for a Network Analysis Module does not disconnect a Telnet session; ignore the message that says the command may disconnect your Telnet session.

If the module number is specified, the download goes to the specified module, but the download will fail if the module is of a different type than is indicated by the download header. If the module number is not specified, the download goes to all modules of that type.



**Caution** After starting the serial download using Kermit, do not attempt to abort the serial download by pressing **Ctrl-C**. Pressing **Ctrl-C** interrupts the download process and could leave the switch in a problematic state. If this occurs, reboot the switch.

### Examples

This example shows how to download the c5000\_spv11.bin file from the mercury host to the supervisor engine module (by default):

```
Console> (enable) download mercury c5000_spv11.bin
Download image c5000_spv11.bin from mercury to module 1FLASH (y/n) [n]? y
\
Finished network single module download. (2418396 bytes)
FLASH on Catalyst:

Type           Address           Location
Intel 28F008    20000000          NMP (P3) 4MB SIM

Erasing flash sector...done.
Programming flash sector...done.
Erasing flash sector...done.
Programming flash sector...done.
The system needs to be reset to run the new image.
Console> (enable)
```

This example shows how to download the fddi\_1113.cpi file from the mercury host to module 4:

```
Console> (enable) download mercury fddi_1113.cpi 4
This command will reset Module 4.
Download image fddi_1113.cbi from mercury to Module 4 FLASH (y/n) [n]? y
|
Finished network download. (1064876 bytes)
.....n
Console> (enable)
```

This example shows how to download the acpflash\_1111.bbi file from the mercury host to module 3:

```
Console> (enable) download mercury acpflash_1111.bbi 3
This command will reset Module 3.
Download image acpflash_1111.bbi from mercury to Module 3 FLASH (y/n) [n]? y
/
Done. Finished network download. (1964012 bytes)
Console> (enable)
```

This sample session shows how to connect to a remote terminal from a Sun workstation and how to use the **download serial** command to copy a software image to the supervisor engine module:

```
[At local Sun workstation]
host% kermit
C-Kermit 5A(172) ALPHA, 30 Jun 95, SUNOS 4.0 (BSD)
Type ? or 'help' for help
C-Kermit> set line /dev/ttyb
C-Kermit> c
Connecting to /dev/ttyb, speed 9600.
The escape character is ^ (ASCII 28).
Type the escape character followed by C to get back,
or followed by ? to see other options.

Console> enable
Enter Password:
Console> (enable) set system baud 19200
^\c
[Back at local Sun workstation]
C-Kermit> set speed 19200
/dev/ttyb, 19200 bps
C-Kermit> c
Connecting to /dev/ttyb, speed 19200.
The escape character is ^ (ASCII 28).
Type the escape character followed by C to get back,
or followed by ? to see other options.

Console> (enable) download serial
Download Supervisor image via console port (y/n) [n]? y

Concentrator Boot ROM (Ver 1.00)

Waiting for DOWNLOAD!!
Return to your local Machine by typing its escape sequence
Issue Kermit send command from there[ Send 'Filename']

^\c
[Back at Local System]
C-Kermit> send c5000_xx.bin
SF
c5000_xx.bin => C5000_XX.BIN, Size: 1233266

X to cancel file, CR to resend current packet
Z to cancel group, A for status report
E to send Error packet, Ctrl-C to quit immediately: .....
.....

..... [OK]
ZB
C-Kermit> quit
host%
```

## Related Commands

**reset—switch**  
**show flash**  
**upload**

## download vmmps

Use the **download vmmps** command to download VMPS database information from a TFTP server.

### **download vmmps**

#### Syntax Description

This command has no arguments or keywords.

#### Default

There is no default setting for this command.

#### Command Type

Switch command.

#### Command Mode

Privileged.

#### Usage Guidelines

Before you can execute the **download vmmps** command successfully, you must use the **set storage** command to configure the IP address of the TFTP server and the name of the VMPS configuration file on that server. If the IP address of the TFTP server is not configured, the **download vmmps** command reports an error. If the configuration filename is not configured, the **download vmmps** command uses the default filename `vmmps-config-database.1`.

After a successful download, the new VMPS information replaces any existing information. If there are not enough resources to build the new configuration database, the VMPS is made inactive.

This command is not supported by the Catalyst 4000 and 2948G series switches.

#### Example

This example shows the **download vmmps** command and typical system responses:

```
Console> (enable) download vmmps  
Re-initialization of Vlan Membership Policy Server with the downloaded  
configuration file is in progress.  
6/14/1998,17:37:29:VMPS-2:PARSER: 82 lines parsed, Errors 0
```

#### Related Commands

**set vmmps tftpserver**

**show vmmps**

# editing

Use the **editing** command to enable enhanced editing mode. Use the **no** form of this command to disable enhanced editing mode.

**editing**  
**no editing**

## Syntax Description

This command has no arguments or keywords.

## Command Type

Cisco IOS ATM command.

## Default

Enabled.

## Command Mode

Line configuration.

## Usage Guidelines

This command is not supported by the Catalyst 4000 and 2948G series switches.

Table 2-3 describes the keys used to enter and edit commands. Ctrl indicates the Control key. You must press **Ctrl** simultaneously with the associated letter key. Esc indicates the Escape key. Esc must be pressed first, followed by the associated letter key. Keys are not case sensitive.

**Table 2-3 Keys To Enter and Edit Commands**

Keys	Function
Tab	Completes a partial command name entry. When you enter a unique set of characters and press the <b>Tab</b> key, the system completes the command name. If you enter a set of characters that could indicate more than one command, the system beeps to indicate an error. Enter a question mark (?) immediately following the partial command (no space). The system lists the commands that begin with that string.
Delete or Backspace	Erases the character to the left of the cursor.
Return	Processes a command when you are at the command line. At the ---More--- prompt on a terminal screen, pressing the <b>Return</b> key scrolls down a line.
Spacebar	Allows you to see more output on the terminal screen. Press the <b>Spacebar</b> when you see ---More--- on the screen to display the next screen.
Left Arrow <sup>1</sup>	Moves the cursor one character to the left. When you enter a command that extends beyond a single line, you can press the left arrow key repeatedly to scroll back to the system prompt and verify the beginning of the command entry.
Right Arrow <sup>1</sup>	Moves the cursor one character to the right.
Up Arrow <sup>1</sup> or Ctrl-P	Recalls commands in the history buffer, beginning with the most recent command. Repeat the key sequence to recall older commands.

**Table 2-3 Keys To Enter and Edit Commands (continued)**

<b>Keys</b>	<b>Function</b>
Down Arrow <sup>1</sup> or Ctrl-N	Returns to more recent commands in the history buffer after recalling commands with the up arrow or Ctrl-P. Repeat the key sequence to recall more recent commands.
Ctrl-A	Moves the cursor to the beginning of the line.
Ctrl-B	Moves the cursor back one character.
Ctrl-D	Deletes the character at the cursor.
Ctrl-E	Moves the cursor to the end of the command line.
Ctrl-F	Moves the cursor forward one character.
Ctrl-K	Deletes all characters from the cursor to the end of the command line.
Ctrl-L or Ctrl-R	Redisplays the system prompt and command line.
Ctrl-T	Transposes the character to the left of the cursor with the character located at the cursor.
Ctrl-U or Ctrl-X	Deletes all characters from the cursor back to the beginning of the command line.
Ctrl-V or Esc Q	Inserts a code to indicate to the system that the keystroke immediately following should be treated as a command entry, <i>not</i> as an editing key.
Ctrl-W	Deletes the word to the left of the cursor.
Ctrl-Y	Recalls the most recent entry in the delete buffer. The delete buffer contains the last ten items you deleted or cut. Ctrl-Y can be used with Esc Y.
Ctrl-Z	Ends configuration mode and returns to the EXEC prompt.
Esc B	Moves the cursor back one word.
Esc C	Capitalizes from the cursor to the end of the word.
Esc D	Deletes from the cursor to the end of the word.
Esc F	Moves the cursor forward one word.
Esc L	Changes to lowercase from the cursor to the end of the word.
Esc U	Capitalizes from the cursor to the end of the word.
Esc Y	Recalls the next buffer entry. The buffer contains the last ten items you deleted. Press <b>Ctrl-Y</b> first to recall the most recent entry. Then press <b>Esc Y</b> up to nine times to recall the remaining entries in the buffer. If you bypass an entry, press <b>Esc Y</b> to cycle back to it.

<sup>1</sup> The arrow keys function only with ANSI-compatible terminals such as VT100.

### Example

This example shows how to disable enhanced editing mode on virtual terminal line 3:

```
ATM#config terminal
Enter configuration commands, one per line. End with Ctrl-Z.
ATM(config)#line vty 3
ATM(config-line)#no editing
ATM(config-line)#
```

### Related Command session

## enable—ATM

Use the **enable** command to enter privileged EXEC mode.

**enable**

### Syntax Description

This command has no arguments or keywords.

### Default

This command has no default setting.

### Command Type

Cisco IOS ATM command.

### Command Mode

EXEC.

### Usage Guidelines

This command is not supported by the Catalyst 4000 and 2948G series switches.

If the system administrator has set a password with the **enable password** command, you are prompted to enter the password before gaining access to privileged EXEC mode. The password is case sensitive. The default password on the ATM module is **atm**.

### Example

This example shows how to cause the system to enter privileged command mode, as indicated by the pound sign (#):

```
ATM>enable
Password: <password>
ATM#
```

### Related Command

**disable—ATM**

## enable—switch

Use the **enable** command to activate privileged mode. In privileged mode, additional commands are available, and certain commands display additional information.

**enable**

### Syntax Description

This command has no arguments or keywords.

### Default

This command has no default setting.

### Command Type

Switch command.

### Command Mode

Normal.

### Usage Guideline

The (enable) in the prompt indicates that the system is in privileged mode and that commands can be entered.

### Example

This example shows how to enter privileged mode:

```
Console> enable  
Enter password:  
Console> (enable)
```

### Related Command

**disable—switch**

## end

Use the **end** command to exit configuration mode.

**end**

### Syntax Description

This command has no arguments or keywords.

### Default

This command has no default setting.

### Command Type

Cisco IOS ATM command.

### Command Mode

Global configuration.

### Usage Guidelines

This command is not supported by the Catalyst 4000 and 2948G series switches.

You can press **Ctrl-Z** to exit configuration mode.

### Example

This example shows how to exit configuration mode and return to EXEC mode:

```
ATM(config)#end
ATM#
```

### Related Command

**exit**

## exit

Use the **exit** command at the system prompt to exit any command mode or close an active terminal session and terminate the EXEC.

**exit**

### Syntax Description

This command has no arguments or keywords.

### Default

This command has no default setting.

### Command Type

Cisco IOS ATM command.

### Command Mode

Available in all command modes.

### Usage Guidelines

This command is not supported by the Catalyst 4000 and 2948G series switches.

When you enter the **exit** command at the EXEC level, the EXEC session is ended. Use the **exit** command at the configuration level to return to privileged EXEC mode. Use the **exit** command in interface and line command modes to return to global configuration mode. Use the **exit** command in subinterface configuration mode to return to interface configuration mode. You can also press **Ctrl-Z** in any configuration mode to return to privileged EXEC mode.

### Example

This example shows how to exit an active session:

```
ATM>exit
```

### Related Commands

**enable**—ATM  
**end**

## format

Use the **format** command to format a Flash PC card. A Flash PC card must be formatted before it can be used.

```
format [spare spare-num] [m/]device1: [[device2:][monlib_filename]]
```

### Syntax Description

<b>spare</b> <i>spare_num</i>	(Optional) Number of spare sectors to reserve when other sectors fail; valid values are 0 to 16.
<i>m/</i>	(Optional) Module number of the supervisor engine containing the Flash device.
<i>device1</i> :	Flash device to be formatted.
<i>device2</i> :	(Optional) Flash device that contains the <i>monlib</i> file to be used to format <i>device1</i> :

### Default

The default number of spare sectors is 0.

### Command Type

Switch command.

### Command Mode

Privileged.

### Usage Guidelines

This command applies only to the Supervisor Engine III and the Catalyst 4000 and 2948G series switch supervisor engine modules. If you attempt to run this command on a Supervisor Engine I or II, you will receive an error message.

A colon (:) is required after the specified device.

You can reserve up to 16 spare sectors for use when other sectors fail. If you do not reserve a spare sector and later some sectors fail, you will have to reformat the entire Flash memory, which will erase all existing data.

The *monlib* file is the ROM monitor library used by the ROM monitor to access files in the Flash file system. It is also compiled into the system image. In the command syntax, *device1*: is the device to format and *device2*: contains the *monlib* file to use.

When you omit the [*device2*:][*monlib-filename*] argument, the system formats *device1*: using the *monlib* that is bundled with the system software.

When you omit *device2*: from the [[*device2*:][*monlib-filename*]] argument, the system formats *device1*: using the named *monlib* file from the device specified by the **cd** command.

When you omit *monlib-filename* from the `[[device2:][monlib-filename]]` argument, the system formats *device1*: using the *monlib* file from *device2*:. When you specify the whole `[[device2:][monlib-filename]]` argument, the system formats *device1*: using the specified *monlib* file from the specified device.

You can also specify *device1:monlib\_filename* as the device and filename to be used, as follows:

**format device1: [device1: [monlib\_filename]]**

If *monlib\_filename* is omitted, the system formats *device1*: using the built-in *monlib* file on the device.

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**Note** When the system cannot find a *monlib* file, the system terminates the formatting process.

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## Example

This example shows how to use the **format** command:

```
Console> (enable) format slot1:
All sectors will be erased, proceed (y/n) [n]?y
Enter volume id (up to 31 characters):
Formatting sector 1
Format device slot1 completed.
Console> (enable)
```