Cisco Catalyst Switch Module 3110 and 3012 for IBM BladeCenter Boot Loader Commands

This appendix describes the boot loader commands on the switch.

During normal boot loader operation, you are not presented with the boot loader command-line prompt. You gain access to the boot loader command line if the switch is set to manually boot, if an error occurs during power-on self test (POST) DRAM testing, or if an error occurs while loading the operating system (a corrupted Cisco IOS image). You can also access the boot loader if you have lost or forgotten the switch password.

Note The default switch configuration allows an end user with physical access to the switch to recover from a lost password by interrupting the boot process while the switch is powering up and then entering a new password. The password recovery disable feature allows the system administrator to protect access to the switch password by disabling part of this functionality and allowing the user to interrupt the boot process only by agreeing to set the system back to the default configuration. With password recovery disabled, the user can still interrupt the boot process and change the password, but the configuration file (config.text) and the VLAN database file (vlan.dat) are deleted. For more information, see the software configuration guide for this release.

You can access the boot loader through a switch console connection at 9600 b/s. Remove the switch from the enclosure, insert the switch in to the enclosure, and press the switch **Mode** button. You should then see the boot loader *Switch:* prompt. The boot loader performs low-level CPU initialization, performs POST, and loads a default operating system image into memory.

arp

Use the **arp** boot loader command to display the contents the Address Resolution Protocol (ARP) table.

arp [*ip_address*]

Syntax Description

ip_address	(Optional) Show the ARP table or the mapping for a specific IP address.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   The ARP table has the IP-address-to-MAC-address mappings.

Examples   This example shows how to display the ARP table:

```
switch: arp 172.20.136.8
arp'ing 172.20.136.8...
172.20.136.8 is at 00:1b:78:d1:25:ae, via port 0
```

boot

Use the **boot** boot loader command to load and boot an executable image and to enter the command-line interface.

boot [**-post** | **-n** | **-p** | *flag*] *filesystem:/file-url ...*

Syntax Description

-post	(Optional) Run the loaded image with an extended or comprehensive power-on self-test (POST). Using this keyword causes POST to take longer to complete.
-n	(Optional) Pause for the Cisco IOS debugger immediately after starting.
-p	(Optional) Pause for the JTAG debugger right after loading the image.
*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/file-url	(Optional) Path (directory) and name of a bootable image. Separate image names with a semicolon.

Defaults   The switch attempts to automatically boot the system by using information in the BOOT environment variable. If this variable is not set, the switch attempts to load and execute the first executable image it can by performing a recursive, depth-first search throughout the flash file system. In a depth-first search of a directory, each encountered subdirectory is completely searched before continuing the search in the original directory.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   When you enter the **boot** command without any arguments, the switch attempts to automatically boot the system by using the information in the BOOT environment variable, if any. If you supply an image name for the *file-url* variable, the **boot** command attempts to boot the specified image.

When you set boot loader **boot** command options, they are executed immediately and apply only to the current boot loader session. These settings are not saved for the next boot operation.

Filenames and directory names are case sensitive.

Examples   This example shows how to boot the switch using the *new-image.bin* image:

```
switch: boot flash:/new-images/new-image.bin
```

After entering this command, you are prompted to start the setup program.

Related Commands	Command	Description
	set	Sets the BOOT environment variable to boot a specific image when the **BOOT** keyword is appended to the command.

cat

Use the **cat** boot loader command to display the contents of one or more files.

> **cat** *filesystem***:/***file-url* ...

Syntax Description

*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/*file-url*	Path (directory) and name of the files to display. Separate each filename with a space.

Command Modes

Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines

Filenames and directory names are case sensitive.

If you specify a list of files, the contents of each file appears sequentially.

Examples

This example shows how to display the contents of a file:

```
switch: cat flash:cbs31x0-universal-mz.122-40.EX2/info
version_suffix: universal-122-40.EX2
version_directory: cbs31x0-universal-mz.122-40.EX2
image_system_type_id: 0x00000002
image_name: cbs31x0-universal-mz.122-40.EX2.bin
ios_image_file_size: 8919552
total_image_file_size: 11592192
image_feature: IP|LAYER_3|PLUS|MIN_DRAM_MEG=128
image_family: CBS31x0
stacking_number: 1.34
board_ids: 0x00000068 0x00000069 0x0000006a 0x0000006b
info_end:
```

Related Commands

Command	Description
more	Displays the contents of one or more files.
type	Displays the contents of one or more files.

copy

Use the **copy** boot loader command to copy a file from a source to a destination.

copy [**-b** *block-size*] *filesystem***:/***source-file-url filesystem***:/***destination-file-url*

Syntax Description		
-b *block-size*	(Optional) This option is used only for internal development and testing.
*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/*source-file-url*	Path (directory) and filename (source) to be copied.
/*destination-file-url*	Path (directory) and filename of the destination.

Defaults   The default block size is 4 KB.

Command Modes   Boot loader

Command History	Release	Modification
	12.2(40)EX2	This command was introduced.

Usage Guidelines   Filenames and directory names are case sensitive.

Directory names are limited to 45 characters between the slashes (/); the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

Filenames are limited to 45 characters; the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

If you are copying a file to a new directory, the directory must already exist.

Examples   This example show how to copy a file at the root:

```
switch: copy flash:test1.text flash:test4.text
.
File "flash:test1.text" successfully copied to "flash:test4.text"
```

You can verify that the file was copied by entering the **dir** *filesystem***:** boot loader command.

Related Commands	Command	Description
	delete	Deletes one or more files from the specified file system.

delete

Use the **delete** boot loader command to delete one or more files from the specified file system.

delete *filesystem***:/***file-url* ...

Syntax Description

| *filesystem***:** | Alias for a flash file system. Use **flash:** for the system board flash device. |
| */file-url* | Path (directory) and filename to delete. Separate each filename with a space. |

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   Filenames and directory names are case sensitive.

The switch prompts you for confirmation before deleting each file.

Examples   This example shows how to delete two files:

```
switch: delete flash:test2.text flash:test5.text
Are you sure you want to delete "flash:test2.text" (y/n)?y
File "flash:test2.text" deleted
Are you sure you want to delete "flash:test5.text" (y/n)?y
File "flash:test2.text" deleted
```

You can verify that the files were deleted by entering the **dir flash:** boot loader command.

Related Commands

Command	Description
copy	Copies a file from a source to a destination.

dir

Use the **dir** boot loader command to display a list of files and directories on the specified file system.

dir *filesystem***:/***file-url ...*

Syntax Description	*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
	/file-url	(Optional) Path (directory) and directory name whose contents you want to display. Separate each directory name with a space.

Command Modes   Boot loader

Command History	Release	Modification
	12.2(40)EX2	This command was introduced.

Usage Guidelines   Directory names are case sensitive.

Examples   This example shows how to display the files in flash memory:

```
switch: dir flash:
Directory of flash:/
2  -rwx      5752  Mar 1 1993 00:06:02 +00:00  config.text
   3  -rwx        24  Mar 1 1993 00:06:02 +00:00  private-config.text
   4  -rwx    9995193   Mar 1 1993 00:04:31 +00:00  cbs31x0-universal-mz.122-40.EX2
   6  -rwx       1147   Mar 1 1993 00:40:29 +00:00  FHH105002F6_IPBase.lic
   9  -rwx       1155   Mar 1 1993 23:55:57 +00:00  FHH105002F6_IPServ.lic
  10  -rwx       1161   Mar 1 1993 23:56:21 +00:00  FHH105002F6_AdvIPServ.lic
   8  -rwx       8016   Mar 1 1993 00:00:51 +00:00  vlan.dat
57931776 bytes total (35725824 bytes free)
```

Table A-1 describes the fields in the display.

Table A-1   dir Field Descriptions

Field	Description
2	Index number of the file.
-rwx	File permission, which can be any or all of the following: • d—directory • r—readable • w—writable • x—executable
1644045	Size of the file.

Table A-1   dir Field Descriptions (continued)

Field	Description
<date>	Last modification date.
env_vars	Filename.

Related Commands

Command	Description
mkdir	Creates one or more directories.
rmdir	Removes one or more directories.

flash_init

Use the **flash_init** boot loader command to initialize the flash file system.

flash_init

Syntax Description

This command has no arguments or keywords.

Defaults

The flash file system is automatically initialized during normal system operation.

Command Modes

Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines

During the normal boot process, the flash file system is automatically initialized.

Use this command to manually initialize the flash file system. For example, you use this command during the recovery procedure for a lost or forgotten password.

format

Use the **format** boot loader command to format the specified file system and destroy all data in that file system.

format *filesystem***:**

Syntax Description	*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines

⚠️

Caution   Use this command with care; it destroys all data on the file system and renders your system unusable.

fsck

Use the **fsck** boot loader command to check the file system for consistency.

fsck [**-test** | **-f**] *filesystem***:**

Syntax Description

-test	(Optional) Initialize the file system code and perform extra POST on flash memory. An extensive, nondestructive memory test is performed on every byte that makes up the file system.
-f	(Optional) Initialize the file system code and perform a fast file consistency check. Cyclic redundancy checks (CRCs) in the flashfs sectors are not checked.
*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.

Defaults   No file system check is performed.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines To stop an in-progress file system consistency check, disconnect the switch power and then reconnect the power.

Examples   This example shows how to perform an extensive file system check on flash memory:

```
switch: fsck -test flash:
```

help

Use the **help** boot loader command to display the available commands.

help

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   You can also use the question mark (?) to display a list of available boot loader commands.

memory

Use the **memory** boot loader command to display memory heap utilization information.

memory

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Examples   This example shows how to display memory heap utilization information:

```
switch: memory
Text:   0x00700000 - 0x0071cf24 (0x0001cf24 bytes)
Rotext: 0x00000000 - 0x00000000 (0x00000000 bytes)
Data:   0x0071cf24 - 0x00723a0c (0x00006ae8 bytes)
Bss:    0x0072529c - 0x00746f94 (0x00021cf8 bytes)
Stack:  0x00746f94 - 0x00756f94 (0x00010000 bytes)
Heap:   0x00756f98 - 0x00800000 (0x000a9068 bytes)

Bottom heap utilization is 22 percent.
Top heap utilization is 0 percent.
Total heap utilization is 22 percent.
Total bytes: 0xa9068 (692328)
Bytes used: 0x26888 (157832)
Bytes available: 0x827e0 (534496)

Alternate heap utilization is 0 percent.
Total alternate heap bytes: 0x6fd000 (7327744)
Alternate heap bytes used: 0x0 (0)
Alternate heap bytes available: 0x6fd000 (7327744)
```

Table A-2 describes the fields in the display.

Table A-2   memory Field Descriptions

Field	Description
Text	Beginning and ending address of the text storage area.
Rotext	Beginning and ending address of the read-only text storage area. This part of the data segment is grouped with the Text entry.
Data	Beginning and ending address of the data segment storage area.
Bss	Beginning and ending address of the block started by symbol (Bss) storage area. It is initialized to zero.

Table A-2   memory Field Descriptions (continued)

Field	Description
Stack	Beginning and ending address of the area in memory allocated to the software to store automatic variables, return addresses, and so forth.
Heap	Beginning and ending address of the area in memory that memory is dynamically allocated to and freed from.

mgmt_clr

Use the **mgmt_clr** boot loader command to clear the Ethernet management port statistics.

mgmt_clr

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Examples   This example shows how to clear the Ethernet management port statistics:

```
switch: mgmt_clr
```

mgmt_init

Use the **mgmt_init** boot loader command to initialize the Ethernet management port.

mgmt_init

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   Use the **mgmt_init** command only during debugging of the Ethernet management port.

Examples   This example shows how to initialize the Ethernet management port:

```
switch: mgmt_init
```

mgmt_show

Use the **mgmt_show** boot loader command to display the Ethernet management port statistics.

mgmt_show

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Examples   This example shows how to display the Ethernet management port statistics:

```
switch: mgmt_show
Statistics              Received    Transmitted
-----------------------------------------------
good frame bytes    :        60         120
good frames         :         1           2
bad frames          :         0           0
dropped frames      :         0           0
queue overflowed    :         0           0
memory access errors :        0           0
```

mkdir

Use the **mkdir** boot loader command to create one or more new directories on the specified file system.

> **mkdir** *filesystem***:/***directory-url* ...

Syntax Description

*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/*directory-url*	Name of the directories to create. Separate each directory name with a space.

Command Modes Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines Directory names are case sensitive.

Directory names are limited to 45 characters between the slashes (/); the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

Examples This example shows how to make a directory called Saved_Configs:

```
switch: mkdir flash:Saved_Configs
Directory "flash:Saved_Configs" created
```

This example shows how to make two directories:

```
switch: mkdir flash:Saved_Configs1 flash:Test
Directory "flash:Saved_Configs1" created
Directory "flash:Test" created
```

You can verify that the directory was created by entering the **dir** *filesystem***:** boot loader command.

Related Commands

Command	Description
dir	Displays a list of files and directories on the specified file system.
rmdir	Removes one or more directories from the specified file system.

more

Use the **more** boot loader command to display the contents of one or more files.

more *filesystem***:/***file-url ...*

Syntax Description	*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
	/*file-url*	Path (directory) and name of the files to display. Separate each filename with a space.

Command Modes   Boot loader

Command History	Release	Modification
	12.2(40)EX2	This command was introduced.

Usage Guidelines   Filenames and directory names are case sensitive.

If you specify a list of files, the contents of each file appears sequentially.

Examples   This example shows how to display the contents of a file:

```
switch: more flash:cbs31x0-universal-mz.122-40.EX2/info
version_suffix: universal-122-40.EX2
version_directory: cbs-universal-mz.122-40.EX2
image_system_type_id: 0x00000002
image_name: cbs-universal-mz.122-40.EX2.bin
ios_image_file_size: 8919552
total_image_file_size: 11592192
image_feature: IP|LAYER_3|PLUS|MIN_DRAM_MEG=128
image_family: CBS31x0
stacking_number: 1.34
board_ids: 0x00000068 0x00000069 0x0000006a 0x0000006b
info_end:
```

Related Commands	Command	Description
	cat	Displays the contents of one or more files.
	type	Displays the contents of one or more files.

rename

Use the **rename** boot loader command to rename a file.

rename *filesystem***:/***source-file-url filesystem***:/***destination-file-url*

Syntax Description	*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
	/source-file-url	Original path (directory) and filename.
	/destination-file-url	New path (directory) and filename.

Command Modes   Boot loader

Command History	Release	Modification
	12.2(40)EX2	This command was introduced.

Usage Guidelines   Filenames and directory names are case sensitive.

Directory names are limited to 45 characters between the slashes (/); the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

Filenames are limited to 45 characters; the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

Examples   This example shows a file named *config.text* being renamed to *config1.text*:

```
switch: rename flash:config.text flash:config1.text
```

You can verify that the file was renamed by entering the **dir** *filesystem***:** boot loader command.

Related Commands	Command	Description
	copy	Copies a file from a source to a destination.

reset

Use the **reset** boot loader command to perform a hard reset on the system. A hard reset is similar to power-cycling the switch, clearing the processor, registers, and memory.

reset

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Examples   This example shows how to reset the system:

```
switch: reset
Are you sure you want to reset the system (y/n)?y
System resetting...
```

Related Commands

Command	Description
boot	Loads and boots an executable image and enters the command-line interface.

rmdir

Use the **rmdir** boot loader command to remove one or more empty directories from the specified file system.

> **rmdir** *filesystem***:/***directory-url* ...

Syntax Description		
*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/*directory-url*	Path (directory) and name of the empty directories to remove. Separate each directory name with a space.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines   Directory names are case sensitive and limited to 45 characters between the slashes (/); the name cannot contain control characters, spaces, deletes, slashes, quotes, semicolons, or colons.

Before removing a directory, you must first delete all the files in the directory.

The switch prompts you for confirmation before deleting each directory.

Examples   This example shows how to remove a directory:

```
switch: rmdir flash:Test
```

You can verify that the directory was deleted by entering the **dir** *filesystem***:** boot loader command.

Related Commands

Command	Description
dir	Displays a list of files and directories on the specified file system.
mkdir	Creates one or more new directories on the specified file system.

set

Use the **set** boot loader command to set or display environment variables, which can be used to control the boot loader or any other software running on the switch.

set *variable value*

Syntax Description	*variable value*	Use one of these keywords for *variable and value*:
		MANUAL_BOOT—Decides whether the switch automatically or manually boots.
		Valid values are 1, yes, 0, and no. If it is set to no or 0, the boot loader attempts to automatically boot the system. If it is set to anything else, you must manually boot the switch from the boot loader mode.
		BOOT *filesystem***:/***file-url*—A semicolon-separated list of executable files to try to load and execute when automatically booting.
		If the BOOT environment variable is not set, the system attempts to load and execute the first executable image it can find by using a recursive, depth-first search through the flash: file system. If the BOOT variable is set but the specified images cannot be loaded, the system attempts to boot the first bootable file that it can find in the flash file system.
		ENABLE_BREAK—Decides whether the automatic boot process can be interrupted by using the Break key on the console.
		Valid values are 1, yes, on, 0, no, and off. If it is set to 1, yes, or on, you can interrupt the automatic boot process by pressing the Break key on the console after the flash file system has initialized.
		HELPER *filesystem***:/***file-url*—A semicolon-separated list of loadable files to dynamically load during the boot loader initialization. Helper files extend or patch the functionality of the boot loader.
		PS1 *prompt*—A string that is used as the command-line prompt in boot loader mode.
		CONFIG_FILE flash:/*file-url*—The filename that Cisco IOS uses to read and write a nonvolatile copy of the system configuration.
		BAUD *rate*—The rate in bits per second (b/s) used for the console. The Cisco IOS software inherits the baud rate setting from the boot loader and continues to use this value unless the configuration file specifies another setting. The range is from 0 to 4294967295 b/s. Valid values are 50, 75, 110, 150, 300, 600, 1200, 1800, 2000, 2400, 3600, 4800, 7200, 9600, 14400, 19200, 28800, 38400, 56000, 57600, 115200, and 128000.
		The most commonly used values are 300, 1200, 2400, 9600, 19200, 57600, and 115200.
		HELPER_CONFIG_FILE *filesystem***:/***file-url*—The name of the configuration file to be used by the Cisco IOS helper image. If this is not set, the file specified by the CONFIG_FILE environment variable is used by all versions of Cisco IOS that are loaded, including the helper image. This variable is used only for internal development and testing.

Defaults

The environment variables have these default values:

MANUAL_BOOT: No (0)

BOOT: Null string

ENABLE_BREAK: No (Off or 0) (the automatic boot process cannot be interrupted by pressing the Break key on the console).

HELPER: No default value (helper files are not automatically loaded).

PS1: switch:

CONFIG_FILE: config.text

BAUD: 9600 b/s

HELPER_CONFIG_FILE: No default value (no helper configuration file is specified).

SWITCH_NUMBER: 1

SWITCH_PRIORITY: 1

Note   Environment variables that have values are stored in the flash file system in various files. The format of these files is that each line contains an environment variable name and an equal sign followed by the value of the variable. A variable has no value if it is not listed in this file; it has a value if it is listed in the file even if the value is a null string. A variable that is set to a null string (for example, " ") is a variable with a value. Many environment variables are predefined and have default values.

Command Modes

Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines

Environment variables are case sensitive and must be entered as documented.

Environment variables that have values are stored in flash memory outside of the flash file system.

Under normal circumstances, it is not necessary to alter the setting of the environment variables.

The MANUAL_BOOT environment variable can also be set by using the **boot manual** global configuration command.

The BOOT environment variable can also be set by using the **boot system** *filesystem***:/***file-url* global configuration command.

The ENABLE_BREAK environment variable can also be set by using the **boot enable-break** global configuration command.

The HELPER environment variable can also be set by using the **boot helper** *filesystem***:/***file-url* global configuration command.

The CONFIG_FILE environment variable can also be set by using the **boot config-file flash:/***file-url* global configuration command.

The HELPER_CONFIG_FILE environment variable can also be set by using the **boot helper-config-file** *filesystem***:/***file-url* global configuration command.

■ **set**

For stacking-capable switches, the SWITCH_NUMBER environment variable can also be set by using the **switch** *current-stack-member-number* **renumber** *new-stack-member-number* global configuration command.

For stacking-capable switches, the SWITCH_PRIORITY environment variable can also be set by using the **switch** *stack-member-number* **priority** *priority-number* global configuration command.

The boot loader prompt string (PS1) can be up to 120 printable characters except the equal sign (=).

Examples

This example shows how to change the boot loader prompt:

```
switch: set PS1 loader:
loader:
```

You can verify your setting by using the **set** boot loader command.

Related Commands

Command	Description
unset	Resets one or more environment variables to its previous setting.

type

Use the **type** boot loader command to display the contents of one or more files.

type *filesystem***:/***file-url* ...

Syntax Description

*filesystem***:**	Alias for a flash file system. Use **flash:** for the system board flash device.
/*file-url*	Path (directory) and name of the files to display. Separate each filename with a space.

Command Modes

Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Usage Guidelines

Filenames and directory names are case sensitive.

If you specify a list of files, the contents of each file appears sequentially.

Examples

This example shows how to display the contents of a file:

```
switch: type flash:cbs31x0-universal-mz.122-40.EX2/info
version_suffix: universal-122-40.EX2
version_directory: cbs-universal-mz.122-40.EX2
image_system_type_id: 0x00000002
image_name: cbs-universal-mz.122-40.EX2.bin
ios_image_file_size: 8919552
total_image_file_size: 11592192
image_feature: IP|LAYER_3|PLUS|MIN_DRAM_MEG=128
image_family: CBS31x0
stacking_number: 1.34
board_ids: 0x00000068 0x00000069 0x0000006a 0x0000006b
info_end:
```

Related Commands

Command	Description
cat	Displays the contents of one or more files.
more	Displays the contents of one or more files.

unset

Use the **unset** boot loader command to reset one or more environment variables.

unset *variable ...*

Syntax Description	*variable*	Use one of these keywords for *variable*:
		MANUAL_BOOT—Decides whether the switch automatically or manually boots.
		BOOT—Resets the list of executable files to try to load and execute when automatically booting. If the BOOT environment variable is not set, the system attempts to load and execute the first executable image it can find by using a recursive, depth-first search through the flash file system. If the BOOT variable is set but the specified images cannot be loaded, the system attempts to boot the first bootable file that it can find in the flash file system.
		ENABLE_BREAK—Decides whether the automatic boot process can be interrupted by using the Break key on the console after the flash file system has been initialized.
		HELPER—A semicolon-separated list of loadable files to dynamically load during the boot loader initialization. Helper files extend or patch the functionality of the boot loader.
		PS1—A string that is used as the command-line prompt in boot loader mode.
		CONFIG_FILE—Resets the filename that Cisco IOS uses to read and write a nonvolatile copy of the system configuration.
		BAUD—Resets the rate in bits per second (b/s) used for the console. The Cisco IOS software inherits the baud rate setting from the boot loader and continues to use this value unless the configuration file specifies another setting.
		HELPER_CONFIG_FILE—Resets the name of the configuration file to be used by the Cisco IOS helper image. If this is not set, the file specified by the CONFIG_FILE environment variable is used by all versions of Cisco IOS that are loaded, including the helper image. This variable is used only for internal development and testing.

Command Modes   Boot loader

Command History	Release	Modification
	12.2(40)EX2	This command was introduced.

Usage Guidelines	Under normal circumstances, it is not necessary to alter the setting of the environment variables.

The MANUAL_BOOT environment variable can also be reset by using the **no boot manual** global configuration command.

The BOOT environment variable can also be reset by using the **no boot system** global configuration command.

The ENABLE_BREAK environment variable can also be reset by using the **no boot enable-break** global configuration command.

The HELPER environment variable can also be reset by using the **no boot helper** global configuration command.

The CONFIG_FILE environment variable can also be reset by using the **no boot config-file** global configuration command.

The HELPER_CONFIG_FILE environment variable can also be reset by using the **no boot helper-config-file** global configuration command.

Examples	This example shows how to reset the prompt string to its previous setting:

```
switch: unset PS1
switch:
```

Related Commands	**Command**	**Description**
	set	Sets or displays environment variables.

version

Use the **version** boot loader command to display the boot loader version.

version

Syntax Description   This command has no arguments or keywords.

Command Modes   Boot loader

Command History

Release	Modification
12.2(40)EX2	This command was introduced.

Examples   This example shows how to display the boot loader version on a switch:

```
CBS31X0 Boot Loader (C31X0-HBOOT-M) Version 12.2(40r)EX2

Compiled Fri 05-Oct-07 01:05 by myl

switch:
```