



File System Check and Repair for PCMCIA ATA Disks

This feature introduces a File-System-Check (fsck) utility in Cisco IOS software for FAT filesystems on PCMCIA disks. The utility performs functions such as checking the boot sector and partition table, checking file and directory structure, reclaiming unused disk space, and updating the FAT file structure.

Feature Specifications for the File System Check and Repair for PCMCIA ATA Disks Feature

Feature History

Release	Modification
12.2(13)T, 12.0(22)S	This feature was introduced.

Supported Platforms

See Cisco Feature Navigator.

Determining Platform Support Through Cisco Feature Navigator

Cisco IOS software is packaged in feature sets that are supported on specific platforms. To get updated information regarding platform support for this feature, access Cisco Feature Navigator. Cisco Feature Navigator dynamically updates the list of supported platforms as new platform support is added for the feature.

Cisco Feature Navigator is a web-based tool that enables you to determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or release. Under the release section, you can compare releases side by side to display both the features unique to each software release and the features in common.

To access Cisco Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

<http://www.cisco.com/register>

Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following URL:

<http://www.cisco.com/go/fn>

Availability of Cisco IOS Software Images

Platform support for particular Cisco IOS software releases is dependent on the availability of the software images for those platforms. Software images for some platforms may be deferred, delayed, or changed without prior notice. For updated information about platform support and availability of software images for each Cisco IOS software release, refer to the online release notes or, if supported, Cisco Feature Navigator.

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Information About File System Check and Repair

Prior to the introduction of the file system check (fsck) utility, corrupt files could not be removed from ATA disks using the Cisco IOS command-line interface CLI.

Files (or file metadata) in an ATA disk can be corrupted by a variety of events, from power failures or system crashes to simple tftp copy failures. Prior to the introduction of the file system check (fsck) utility, corrupted files could not be deleted from a usable ATA disk without removing, reformatting, and reinstalling the disk.

The **fsck** privileged EXEC command allows you to conveniently recover wasted disk space directly from the CLI.

How to Use the File System Check and Repair Feature

No configuration tasks are associated with this enhancement. For usage guidelines, see the [“Command Reference” section on page 3](#).

Additional References

None.

Technical Assistance

Description	Link
Technical Assistance Center (TAC) home page, containing 30,000 pages of searchable technical content, including links to products, technologies, solutions, technical tips, tools, and lots more. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/public/support/tac/home.shtml

Command Reference

This section documents the command introduced in this feature.

fsck

To check and repair a File Allocation Table (FAT)-based disk, use the **fsck** command in privileged EXEC mode.

fsck *filesystem*: [/automatic]

Syntax Description		
	<i>filesystem</i> :	The filesystem prefix indicating the disk to be checked. The colon (:) is required. Typically, the filesystem prefix will be disk0: or disk1: .
	/automatic	Specifies that the check and repair actions should proceed automatically. This option can be used to skip the prompts for each check and repair action.

Defaults Prompts for actions are issued.

Command Modes Privileged Exec

Command History	Release	Modification
	12.2(13)T	This command was introduced.

Usage Guidelines This command will perform all of the steps necessary to remove corrupted files and reclaim unused disk space. Changes include checking for incorrect file sizes, cluster loops, and so on. The default form of this command will issue multiple prompts to confirm each of the changes. However, you can skip these prompts by using the **/automatic** keyword when issuing the command.

When the **/automatic** keyword is used you will be prompted to confirm that you want the **/automatic** option. Prompts for actions will be skipped, but all actions performed will be displayed to the terminal (see the example below).

This command works with ATA PCMCIA cards formatted in DOS.



Note

Only one partition (the active partition) will be checked in the ATA disk.

Examples The following example shows sample output from using the **fsck** command in automatic mode:

```
Router# fsck /automatic disk1:
Proceed with the automatic mode? [yes] y
Checking the boot sector and partition table...
Checking FAT, Files and Directories...
Start cluster of file disk1:/file1 is invalid, removing file
File disk1:/file2 has a free/bad cluster, truncating...
File disk1:/file2 truncated.
File disk1:/file3 has a free/bad cluster, truncating...
File disk1:/file3 truncated.
File disk1:/file4 has a invalid cluster, truncating...
File disk1:/file4 truncated.
```

```
File disk1:/file5 has a invalid cluster, truncating...
File disk1:/file5 truncated.
File disk1:/file6 has a invalid cluster, truncating...
File disk1:/file6 truncated.
File size of disk1:/file7 is not correct, correcting it
File disk1:/file8 cluster chain has a loop, truncating it
File disk1:/file8 truncated.
File disk1:/file9 cluster chain has a loop, truncating it
File disk1:/file9 truncated.
File disk1:/file16 has a free/bad cluster, truncating...
File disk1:/file16 truncated.
File disk1:/file20 has a free/bad cluster, truncating...
File disk1:/file20 truncated.
Reclaiming unused space...
Created file disk1:/fsck-4 for an unused cluster chain
Created file disk1:/fsck-41 for an unused cluster chain
Created file disk1:/fsck-73 for an unused cluster chain
Created file disk1:/fsck-106 for an unused cluster chain
Created file disk1:/fsck-121 for an unused cluster chain
Created file disk1:/fsck-132 for an unused cluster chain
Created file disk1:/fsck-140 for an unused cluster chain
Created file disk1:/fsck-156 for an unused cluster chain
Created file disk1:/fsck-171 for an unused cluster chain
Created file disk1:/fsck-186 for an unused cluster chain
Created file disk1:/fsck-196 for an unused cluster chain
Created file disk1:/fsck-235 for an unused cluster chain
Created file disk1:/fsck-239 for an unused cluster chain
Updating FAT...
fsck of disk1: complete
```

