



# Tech Info Library

## Power Macintosh: Write Cache Hard Drive Corruption Issue (5/96)

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Security: Everyone

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### TOPIC -----

Customers who have installed some third-party hard disk driver software on Power Macintosh computers have experienced some loss of data and corruption.

### DISCUSSION -----

The third-party software may improperly handle write-caching which runs the risk of data loss or even corruption of the disks' file structure on shutdown. Apple software properly supports write caching (and always has) on any hard disk shipped.

Many high performance disk drives available for Macintosh computers utilize on-board hardware write-cache mechanisms. Although these devices can enhance disk performance, they also require special software consideration to avoid the loss of data on shutdown.

Write cache functions are part of the ANSI SCSI-2 Specification. These cache functions have been there for a while. A Technote was written by Apple which was directed primarily to IDE and SCSI disk interface module software developers. This tech note addresses ways to flush the disk's write cache during the shutdown process.

Recent postings on the Internet by some third-party hard disk driver software vendors may lead customers to believe this problem is caused by Apple hardware or software. This issue is not an Apple hardware or software issue, it is a third-party issue. Apple has no direct control over what third-party software vendors do with their software. If customers replace the Apple hard disk driver by formatting with a third-party disk driver, or if they purchase a drive from another vendor, Apple has no direct connection with either the third-party software or hardware.

Suggestions

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1. Make that you have the latest driver from the vendor from whom you purchased the hard drive.

- Apple Developers have been made aware of the driver requirements and should be updating their drivers if they encounter problems.

- You should update both third-party and Apple drivers to the latest versions for all the drives on your Macintosh computer.

2. After updating the driver, run Apple's Disk First Aid application or run a drive utility program (such as Norton Utilities) to repair any corruption or directory damage that may have occurred previously.

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16 May 1996 - Corrected spelling of SCSI-2

06 May 1996 - Added keyword.

28 Mar 1996 - Added Info Alley publication information.

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