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DOS Compatibility Card: Can't Use Most DOS Backup Programs 7/95

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Security:       Everyone
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TOPIC ---

We are trying to perform a backup to floppy of files from a Macintosh DOS
Compatible computer.

When we tried to configure the backup or to do it using DOS backup, a message
appears saying the estimated time is 1:24. More than an hour passes and nothing
occurs, no copy to disk is made. From Windows, it hangs up and we have to reset
the computer. From CPBACKUP, the program hangs up when the backup is attempted,
the same program works fine in a 486DX equipped PC.

Reinstalling MS-DOS and Windows have not corrected problem.

DISCUSSION --

The problem you are experiencing is due to the program trying to write directly
to the floppy drive hardware. Since we are only emulating a DOS compatible
floppy drive, accessing the hardware directly fails. Backup programs in order
to gain speed, typically use DMA to write to floppy drives. Since the backup
programs are not using DOS BIOS calls, they fail when they don't find the actual
hardware they're looking for. However, some applications, such as Norton Backup
for Windows can perform backups to floppy disks.

Norton Backup for Windows has the same problem as other backup software when
using the floppy drive but Norton Backup also has a work around for this.
Norton Backup for Windows has a feature to backup files to any valid DOS path.
By using "A:\" as the DOS path, Norton Backup for Windows will backup to floppy
disks when used with the DOS Compatibility Card.

The DOS Compatibility Card is not a "true DOS machine", we are a "DOS
compatible" machine. Because of current technology limitations, there is no way
to "emulate" DMA access to an Intel x86 architectured device. Anything that
tries to access hardware directly, do not work in the DOS compatible card

environment. When the PC was first designed, and in subsequent revisions of the PC hardware, BIOS was designed to handle the interface between the operating system and hardware. In order to ensure software compatibility, software programmers were urged to use BIOS calls as opposed to writing directly to hardware. With our DOS compatible card, any program that makes BIOS calls should work, and any program that writes directly to hardware will probably fail.

There are no plans to add support for floppy disk DMA access to the DOS Compatible Card. Current solutions to the problem are copying the complete drive file to a different storage device while in the Macintosh environment, or double-clicking the drive container file and copying individual files from it, also while in the Macintosh environment.

Article Change History:
17 Jul 1995 - Added third-party solution
07 Nov 1994 - Added additional information on why Backup programs fail.

Support Information Services

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