

Working with Floppy Disks

AIM:

This discussion is written in response to numerous problems encountered by students that have been using WINDOWS based applications (especially WORD for WINDOWS) and documents stored on floppy disks.

BACKGROUND:

In the relatively recent past, hard disks were expensive and small (less than 40MB) so that hard disk storage was at a premium. It was often necessary to save documents on floppy disks rather than take up room required by applications. Of course applications were much smaller then with even the most sophisticated DOS based wordprocessors (like WORDPERFECT) taking up no more than about 6MB of hard disk space. Even large documents could fit comfortably on a single floppy disk as the files produced by such programs were also relatively compact.

With the advent of the WINDOWS operating environment the situation changed dramatically. WINDOWS 3.1 occupies about 12MB of disk space and the WINDOWS based wordprocessors (eg MS Word 6) take up a staggering 25MB or more. [NB – MS Word 2000 takes up a lot more!] The reasons for this occasionally prompt heated argument from disgruntled users who constantly find themselves running out of disk space or finding that they have to upgrade their PC in order to run the latest software at anything more than a snail's pace. Essentially, there are two major reasons for this size increase - applications now have many, many more features and the graphical user environment of WINDOWS is inherently more resource hungry, resulting in much larger documents. The assumption by those writing WINDOWS applications therefore seems to be that documents will be created and usually stored on a hard disk rather than floppy disks. (More on this later)

One of the advantages of the WINDOWS environment is the ease with which it handles embedded graphics, and other non textual objects. These objects however, represent considerably larger amounts of data than pure text. Cutting and pasting between several documents also becomes a simple process and is usually best carried out with both documents open simultaneously.

THE PROBLEM:

Problems arise though when two or more documents need to be accessed on the same drive. If both documents reside on the hard disk there is no problem as both are always accessible. Floppy disks are a different matter as they are "demountable" - ie they can be removed, unlike hard disks (sometimes called "fixed disks"). If the two documents are on different floppy drives ie one on a 1.44MB 3.5" disk, and the other on a 1.2MB 5.25" disk, then as long as both disks remain in their appropriate drives while they are being accessed, there will be no difficulties. But what happens when you have document A1.doc on drive A (1.44MB floppy) and document B2.doc also on a (different) 1.44MB disk?

This is a potentially disastrous situation! When the program needs to access the original disk and it has been replaced by another disk, it assumes that the original disk has become corrupted. At this point loss of data is often the outcome. [Personally I think this is a defect in the operating system - it should be smart enough to realise that the disk has changed.] Other hazardous situations are when a floppy disk becomes full and can no longer hold the whole document or when the autosave feature attempts to save to a disk that has been removed without the document being closed first.

SOLUTION:

Specifically, don't try to open two or more documents on the same floppy drive if it means a disk must be removed. Also, ensure that you always close a document that is on a floppy drive before you remove it from the drive - particularly when the "autosave" feature is enabled (it usually is).

DISCUSSION:

These days it is difficult to buy hard disks smaller than 10000MB and their price has dropped to less than \$1 per MB. This in fact makes hard disk storage much cheaper than floppy disks! But apart from cost and the potential problems with using floppy based documents, there are other good reasons to use hard disk storage rather than floppy disks. Running even relatively small documents sourced on a floppy disk is painfully S L O W in comparison. Floppy disks are less reliable and more easily damaged, stolen or misplaced than hard disks. The most recent programs have sophisticated file searching capabilities that enable efficient indexing and retrieval of documents. This is particularly important as the number of documents increases and is a much better solution than hunting through dozens of inevitably inadequately indexed floppies.

But what about backups? - hard disks fail eventually and sometimes documents become corrupted. What I suggest is not that floppy disks are no longer used but that they should **not** be used as the primary storage medium. Indeed until every home is connected to the "information superhighway" floppy disks are the simplest way to take documents home to work on. Also floppy backups are still a good idea as long as they are used with the above precautions in mind.

One of the benefits of being connected to a network is that a user has additional hard disk storage space on the file server. The space allocated to each individual user in their home directory is ideal for backups as the file server is itself backed up remotely each night (that's right - a backup of the backups!) LAN based documents are also portable within the network - wherever you log on you will have access to them.

RECOMMENDATIONS:

- (i) Create your original document on a hard disk (either locally on **drive C:**, or in your home directory on the LAN, **drive H:**) and **NOT** on a floppy disk.
- (ii) You should always create at least one backup of your documents preferably in two different locations ie - original on your local hard disk and backup in your home directory, or original in your home directory and backup on floppy disk.

Note 1 - documents

I have used the term document in the context of using a word processor. Please take this term to mean any file that you create whether it is a spreadsheet, data file, or any other format.

Note 2 - backups

A backup is a copy of the original document. The simplest way to copy a document in a WINDOWS application is to use the **SAVE AS** option in the **FILE** drop down menu by entering the new destination path (home directory or floppy disk) as appropriate. Do this the **LAST** thing before you close the document or the application, otherwise you end up working on the backup copy instead of the original. Also remember to save any future changes the original to the backup. Preferably, don't change the name of the file other than perhaps the extension to **.BAK**. Changing the extension is not essential but it will help to identify that the document is not the original.

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