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XCOPY IS XCELLENT

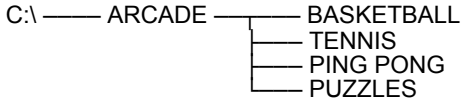
Lets get off the memory kick for a bit, so I can share something useful and practical with you.

Everyone who owns a computer copies files. Sometimes the copy is from floppy to hard drive, sometimes the reverse, sometimes it is floppy to floppy, and often it is hard drive to another spot on the same hard drive. Usually, the job is fairly simple. Copying a single file from your hard drive to a floppy so you can share it with a friend takes only a moment, and it is not really conceptually hard. You put a blank floppy in your A: drive, log on to your hard drive in the subdirectory where the file exists, and type the command COPY MYGAME.EXE A:, whereupon your computer happily complies. But what if things are more complex? Suppose you have a directory containing one executable file (MYGAME.EXE) and over 70 little support files (SAVEGAME.001...SAVEGAME.073), and you want to copy all of them to a floppy. Is the COPY command the best way? Nope.

A much more efficient (and much quicker) way is to use XCOPY. XCOPY is not an internal command (embedded inside COMMAND.COM), so you need a copy of the program to run it. The good news is that it comes with DOS, and has been around since at least version 3.3, so you probably have it even if you don't know it. In MS DOS Version 6.22, it is XCOPY.EXE, 16,390 bytes. Take a look now. I bet it is in your DOS subdirectory.

Here is why XCOPY is more efficient and quicker than COPY, using our example above. If you give the command COPY *.* A:, DOS will read a file, then copy it, then read another file, then copy it, then read another file, then copy it ... until all 70 odd files have been processed. It does the job, but one file at a time. On the other hand, if you give the command XCOPY *.* A:, DOS will first read all the files into memory, then copy them to the floppy in one fell swoop. If it runs out of memory space when reading, it will copy what it has, and then read more in. There is a BIG difference in speed when dealing with large numbers of little files, especially when copying from one spot to another on your hard drive. XCOPY is a little less efficient when copying to floppies, because disk access is what takes most of the time, no matter what method you are using to copy.

But wait, XCOPY is even handier. If COPY is a tool like a pocketknife, XCOPY is like a big Swiss Army Knife with lots of gadgets on it. My friend, neighbor and fellow ham (WB9LNL) Tom Oehler was over the other day. He purchased a batch of arcade games for his daughter. The manufacturer had thoughtfully provided the games on both 5¼ inch, 360k floppies, and on a single 3½ inch, 1.44m floppy. Unfortunately, Tom's daughter had a machine with only 3½ inch, 720k floppies (Murphy's Law strikes again!). I installed the games on my hard drive (they were compressed on the floppies), and the subdirectory structure looked something like this (fictitious names):



ARCADE was empty, but each of the four subdirectories under it contained files. Fortunately, none of the four contained more than 360k in files, so we knew two 720k floppies would do it. We wanted to preserve the same subdirectory structure on the floppies, for reasons not pertinent here. I moved to the BASKETBALL subdirectory on my hard drive, put a clean 720k floppy in the B: drive, and gave the following command:

XCOPY *.* B:\BASKETBALL

XCOPY came back with the following message, shown exactly as it appeared:

Does BASKETBALL specify a file name
or directory name on the target
(F = file, D = directory)?

I touched the letter D, whereupon XCOPY created the BASKETBALL subdirectory on B:, read all the files into memory, and copied them to BASKETBALL in one shot. Pretty nifty.

Then I moved to the TENNIS subdirectory, and repeated the command: XCOPY *.* B:\TENNIS. The message appeared again, and I pressed D again. After a bit of whirring, that floppy contained files in the first two of four subdirectories. After changing floppies and using XCOPY twice more, our job was done.
There is not room here to unfold all the gadgets from the Swiss Army Knife, but there are a lot more. There are 8 separate "switches" you can invoke when giving the command, including for example, copying only files dated on or after a specified date, prompt for confirmation before copying each file, and others. Basically, XCOPY is a time-saver that will make you more efficient. Dig out your DOS book, and take a look. Or better yet, give the command: XCOPY /? and it will tell you what it can do, directly on your screen. Slick. Happy computing, and 73 for now.