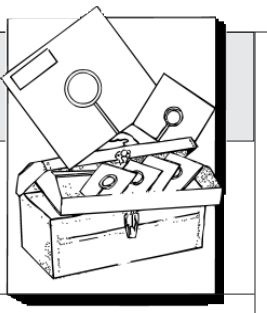
STATE-OF-THE-ART CONTRACTOR

Putting Windows to Work



by Craig Savage

I've taken some shots lately for my admittedly anti-DOS rhetoric (see *Letters*, 12/93). As an act of contrition, I want to make peace with those pioneers who took all the time to learn DOS and now don't want to leave a good tool behind. So instead of talking about how Mac-like Windows is, let's bury the hatchet and look at the advantages Windows offers to DOS users.

But it takes two to tango. Die-hard DOS users need at least to admit the possibility that Windows is an improvement over DOS. Start by thinking of Windows as nothing more than a DOS extender. When you use Windows and DOS together, you get advantages that neither can give alone.

Long on Memory

One difference between DOS and Windows programs is the way they use memory. DOS programs require a certain amount of memory to start, and they tie up that memory until you quit the program. If the DOS program is a real memory hog — as is increasingly the case — other programs that require memory, like PIMs, won't run properly.

Windows applications, however, use memory cooperatively, parceling out memory as needed. You don't need to know how Windows does this (an advantage in itself), but the net result is that Windows programs can efficiently make use of as much as 16 megabytes of memory on a 286 machine, and up to 4 gigabytes on a 386 and 486.

Multitasking

The behind-the-scenes management Windows supplies leads to one of the most noticeable advantages of using the Windows interface: the ability to run more than one DOS application at a time. Instead of closing one program before opening another, Windows' "multitasking" function lets you load several DOS and Windows programs and switch among them with a simple keystroke combination (or a mouse click, if you dare). So while you're spell-checking a contract in your word processing program, for example, you can also be printing a letter or crunching spreadsheet numbers in the background.

PIFs. To get several DOS programs to run simultaneously, you'll have to load a PIF (Program Information File). Recent DOS programs come with a prewritten PIF, but you can also create or edit a PIF in the Windows PIF Editor. Working with PIFs should be no trouble for DOS users who are accustomed to adding device drivers to their CONFIG.SYS file. A PIF allows you to do the same kind of under-the-hood tinkering — except the options have been standardized. It may take some experimenting to get a PIF to do what you want it to. The settings shown in Figure 1 are a good place to start.

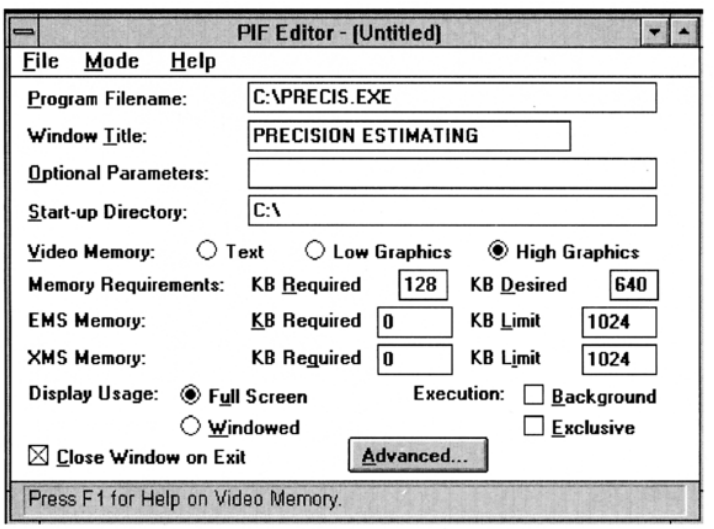


Figure 1. *Windows uses a Program Information File (PIF) to run DOS programs. The standard settings shown here can be changed using the Windows PIF Editor.*

Switching between programs. Once you've got a couple of programs up and running (you can mix and match DOS and Windows applications), use the keyboard combination ALT-TAB to switch among them. While holding down the ALT key, hit the TAB key to cycle through a list of all the programs that are currently running. When you find the one you want, just release the keys.

The Windows Clipboard

Another advantage of running more than one program at a time is that you can use the Windows Clipboard to copy information from one application to another.

To see how this works, let's say you have estimate totals in a spreadsheet program that you would like to include in a proposal you are writing in a word processing program. Follow these steps:

- Make sure the spreadsheet is running in window-mode (the keyboard combination CTRL-ENTER toggles applications between full-screen-mode and window-mode).
- Open the command menu by clicking on the "minus" sign in the top left corner of the window.
- Select the "mark" command.
- Click the mouse button to begin marking data. Drag the mouse pointer over the text you want to mark, and release the button when you're done.
- Select "copy" from the command menu to deposit a copy of the data on the Clipboard.
- Cycle to the word processing application (use the ALT-TAB key combination).
- Select "paste" from the command menu to transfer a copy of the data from the Clipboard to the word processing program.

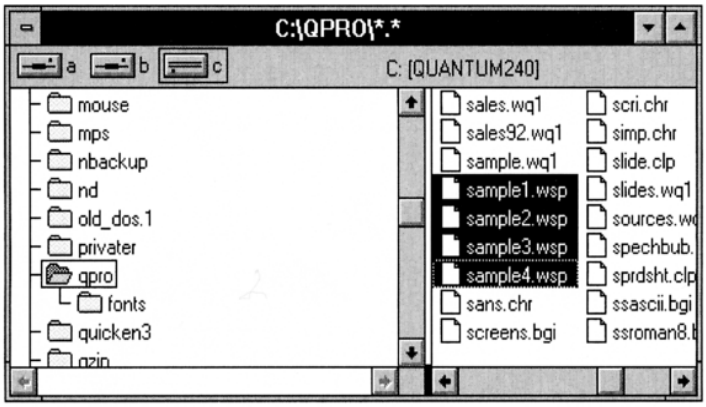


Figure 2. *After selecting files from the directory tree in the Windows File Manager, use the function keys, mouse, or menu options to copy, delete, or move them.*

It actually takes less time to perform these seven easy steps than it does to read them. And the procedure is the same no matter which two programs you're running.

Easy File Management

It's easier to deal with files using the Windows File Manager than the DOS command line.

Fast disk copying. Windows reads the entire contents of a floppy disk into memory, so it can copy disks much faster than DOS, which performs a series of partial "reads" and "writes."

No more wildcards. To copy, move, and delete files at the DOS command line, you can work either with one file at a time, or with groups of files, using the "?" and "*" wildcards. Windows works more like DOSSHELL, only better. Windows lists the directory tree on the screen, and displays all the files in each directory. Holding down the CTRL key lets you select a group of files by clicking on the file names (Figure 2). Once you've selected all of the files you want to work with, F8 will copy them and DEL will delete them (with a handy little warning message that gives you one last chance to change your mind). The process is the same when you want to RENAME and DELETE an entire directory. All of these options can also be selected from a menu.

Finally, with Windows you can reorganize files and directories simply by dragging and dropping them into any position in the directory tree. The DOS 6.2 MOVE command does the same thing, but you still have to use the command line. Using a mouse really is easier.

Those of you who want a better understanding of Windows and its DOS roots should read *Windows 3.1 Secrets* by Brian Livingston ($39.95, International Data Group, 1992; 800/762-2974). ■

Craig Savage, a longtime builder and computer user, owns Savage Co., in Carpinteria, Calif., and publishes Macintosh Construction Forum *and* Window On Construction.

If you have a question about computing in construction, address it to State-of-the-Art Contractor, JLC, RR#2, Box 146, Richmond, VT 05477.