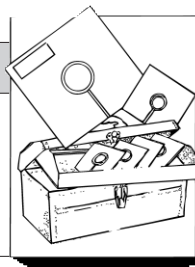


# Moving From DOS To Windows

by Craig Savage



Most of the 100 million personal computers in use today run with Microsoft's MS-DOS operating system. In the construction industry, where upwards of 80% of the businesses are computerized, or at least have tried to computerize, it's not uncommon to hear about builders who bought systems and never used them, or who under-use their machines, letting them sit idle when not being used for one specific task, like payroll or word processing. In my opinion, the reason for this state of affairs is the DOS prompt, that ancient and cryptic command line symbol.

These days, however, contractors don't need to do DOS. Don't get me wrong. I'm not saying DOS is dead — at least not yet. All of the powerful construction applications that run only under DOS are welcome tools. But the bottom line is that more and more of today's automated construction offices are using GUI (graphical user interface) applications. And unless you're on a Mac, that means Microsoft's *Windows*.

Standardizing business applications on the Windows platform has advantages that can't be emphasized enough. I've mentioned them before — standard user interface and data compatibility across programs, simplified networking, information "links" between applications, remote access to on-site computers, and fax and graphics integration.

## Hardware

So how do you get from DOS to Windows? Hardware makes a difference. Those of you with PCs sporting the trusty 8086 and 80286 chips need to upgrade to a Windows-minimum 80386. As prices head downward, the price of an all-new 386 system can be less than a piece-meal upgrade. A 486 system is even better and is getting less expensive every day. You probably won't be able to sell your old machine, but you shouldn't throw it away either. There are always little dedicated jobs old computers can do, like printing labels, writing checks, and playing games.

Windows and Windows programs need lots of RAM and plenty of hard disk storage. You should get at least 4 megabytes of RAM (6 megs or 8 megs is better), and as big a hard drive as you can afford. You'll fill up an 80-meg hard-drive in no time, so look for something in the 200-meg to 250-meg range, where per-megabyte costs are low.

## Software

Other than upgrading your version of DOS (Windows requires at least DOS 3.1, but runs especially well on DOS 5.0 and 6.0), you don't need to immediately switch everything to Windows; you can upgrade to Windows software gradually. Most popular "off the shelf" spreadsheet and word processing programs are already available in Windows versions. Depending on

what you're using now, you can probably make the switch without losing existing templates and files. Windows versions may run a little slower than their DOS counterparts, but the added features more than compensate. Of course, CAD and other graphics programs migrate to the Windows platform with ease.

Many Windows applications let you work with DOS commands as well. For instance, you can run *Lotus 1-2-3 for Windows* using all of the old keyboard commands you've already learned, or you can do it the Windows way and use a mouse instead.

Windows allows you to run DOS programs too, but without all of the advantages of the Windows environment. Typically, you can start a program by clicking on its Windows icon, and when you exit from the DOS program, you find yourself back on the Windows desktop. In between, however, the program runs as if Windows were not present.

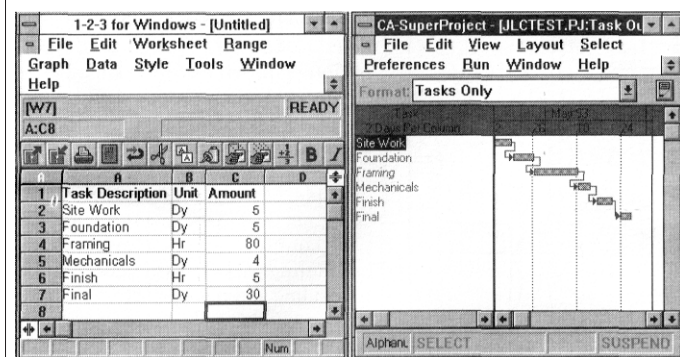
You can usually "cut and paste" data created in DOS programs into Windows programs. The process involves using the "clipboard," a function that stores data for transfer. Most Windows programs accept text from the clipboard as if it were being typed in from the keyboard.

## Training Wheels

What software should you buy first? If you are just starting out with Windows, or if you tried to learn DOS and failed, a good set of Windows "training wheels" is what you need. I suggest you purchase an "integrated" application like *Claris Works* or *Microsoft Works*. These inexpensive (\$200) programs are the Shopsmith of software: They cram into one "tool" abridged versions of a full-scale word processor, spreadsheet, database, drawing program, and communications program. As you learn to use one of these modules — the word processor, for example — you will also be learning many of the standard Windows operating conventions, like opening and closing files, printing, and moving windows around on your "desktop." Soon you'll feel comfortable enough to try another module, and then another Windows application.

Another advantage is that none of your effort is lost by working with the "shrunk" versions that make up each module of these integrated applications. Your files will be com-

## Linking Windows Data



One useful Windows feature is "Dynamic Data Exchange" (DDE), which allows you to link the data in different applications. On the Windows desktop shown here, the length of the bars on the Gantt chart in *SuperProject* (right window) automatically change when the "amount" of time is altered on the *Lotus 1-2-3* spreadsheet (left window).

patible if you decide to upgrade to more powerful Windows applications.

What about construction programs for Windows? Well, as with the Macintosh in its early days, there's not a whole lot of construction-specific software available for Windows just yet. But they are beginning to surface. And don't forget that most of the *Excel* and *Lotus 1-2-3* templates that were designed for DOS or the Mac will work fine as Windows versions. For example, *MacNail* (Turtle Creek Software, 607/589-6858) is a complete construction estimating and accounting package with built-in scheduling and management tools. It is an *Excel* template made for the Mac, but it works just fine as a Windows application.

### What About DOS?

My advice to new computer users who begin with Windows is to avoid DOS when you can. Ideally, the only DOS command you should ever need in "WIN," which whisks you off to the Windows desktop where there's plenty to learn. For the novice, the rest can be done with a mouse.

I don't expect this advice to go over well with DOS folks. With all due respect, DOS users are steeped in the mysterious and will find themselves compelled to investigate what is going on in DOS, "behind" Windows. The savvy DOS user can change plenty of settings and make

numerous adjustments to improve the performance of Windows, but the novice should beware. Windows operations are complex, and changing instructions in crucial control files can result in disaster. So don't fool with them unless you know what you're doing.

The good news is that Windows will probably do everything you need right out of the box. True, a lot of the flexibility and speed of DOS has been traded away for a standard graphical user interface. But the new DOS version 6.0 was written with Windows in its sights, with several enhancements that should make Windows run more smoothly. For example, built-in file compression can almost double the storage space on your hard disk, which more than compensates for the \$49 upgrade price by making it possible to store more of those gigantic Windows files. And because file compression works automatically, the user needs to know next to nothing about it. In my opinion, the more Windows shields the user from DOS, the better. ■

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## Construction Software For Windows

**E**xcept for the general purpose spreadsheets and word processors, the following is a partial listing of Windows software designed for builders:

### Spreadsheets:

*Excel* (Microsoft Corp., 800/426-9400)  
*Lotus 1-2-3* (Lotus Development Corp., 800/872-3387)  
*Quattro Pro* (Borland International, 408/438-5300)

### Word processors:

*Word* (Microsoft Corp., 800/426-9400)  
*WordPerfect* (WordPerfect Corp., 800/526-5059)  
*Ami Pro* (Lotus Development Corp., 800/872-3387)

### Estimating:

*WinEst* (WinEstimator, 800/950-2374)  
*Contractor's Dream* (Work Horses, 800/777-2477)

### Accounting:

*Construction Gold* (Timberline Software Corp., 503/644-8155)  
*Quicken* (Intuit, 800/624-8742)

### Project Management/Scheduling:

*Timeline* (Symantec Corp., 408/253-9600)  
*CA SuperProject* (Computer Associates, 516/227-3300)  
*Milestones Etc* (Kidasa, 800/765-0167)  
*Microsoft Project* (Microsoft Corp., 800/426-9400)

### CAD:

*AutoCAD* (Autodesk, Inc., 800/964-6432)  
*Drafix Windows CAD* (Forsight Resources Corp., 800/231-8674)  
*CadVance* (Isicad, 714/533-8910)  
*Vellum* (Ashlar, 408/746-3900)  
*Chief Architect* (Advanced Relational Technologies, 408/776-0301)

### Integrated:

*Claris Works* (Claris Corp., 408/727-8227)  
*Microsoft Works* (Microsoft Corp., 800/426-9400)