

## Periodic Reinstallation of Windows

- by Stan Kaplan, WB9RQR  
105 Martin Drive  
Port Washington, WI 53074-9654  
(262) 284-9346  
skaplan@mcw.edu

Dave Barrow (N9UNR) stopped by today and I asked him what he thought might be useful to you in this column. Dave runs Stonewall Computers, a consulting business, and recommends this interesting, useful idea to his customers. He believes that every Windows (95 or 98) user should plan and execute a complete reinstallation every now and then, perhaps after a year of heavy use. Let us look at a bit of background to understand why Guru Dave recommends this, and why his logic is correct.

Windows is nothing more than a large suite of programs collectively called a Graphical User Interface. Notwithstanding what Microsoft tells us, it completely depends on DOS, the actual operating system that interfaces between the hardware and software in every computer. I mentioned proof of this a couple of months ago (see No. 74, January 2000). If Windows wants to format a floppy, it cannot do it directly. It must make a request to DOS for the process to begin and complete. That is why it takes about 40% more time to format a disk in Windows, when compared to a format in native DOS on the very same machine. You ask Windows to do it, and Windows must then ask DOS. DOS tells the hardware to do it and how. The hardware does the job, reports it is finished to DOS. DOS then reports it back to Windows, and Windows reports it to you. Naturally, it is going to take more time to go through Windows when you want to do something. Windows is nothing more than an intermediary in the process!

Now, multiply that intermediary behavior for the many, many tasks Windows must accomplish. Furthermore, you must also understand that the Windows program(s) must be written to accomplish each task that you might request of it. The result is that Windows is now such a large and cumbersome suite of interacting programs that it is hard to predict what will happen when Windows is running. Not even the software engineers always know what is going on.

A case in point: On occasion, my computer has been sitting idle for many hours, perhaps when I was reading a book on the other side of the room. Suddenly, one of the floppy drives is accessed, or something is written to or read from the hard drive (as judged by the hard drive activity LED), all without being touched by a human! Have you had this happen? I bet you have. Now, sometimes this is a perfectly predictable process caused by an event timer for something or other. On the other hand, sometimes it happens unpredictably, perhaps because of unintentional interactions between parts of the Windows program suite. I jokingly call this kind of behavior self-stimulation by Windows, though generally couched in somewhat different terms.

The point is, there are files being created or modified or deleted all the time by Windows without our knowledge or control, and these changes tend to increase the number of files on the hard drive ("file creep"). More sources of creep are the temporary files that are created when we install new software. These temporary files are supposed to be deleted when the installation is done, but this routinely does not happen. Another source is those GIF files that collect on your hard drive every time a new web page is drawn on your screen. Yet another source are those cookie files that various sites write on your hard drive platters whenever you surf the web.

So then, with time, unused and unwanted files accumulate. Furthermore, complex interactions and even an occasional stray cosmic ray can damage files that are critical and that are used

every day. I had that happen last week, when Windows reported it could not find a highly critical file that it needed to operate. I went looking for it, and found it exactly where it should be, but something had deleted one letter in its name! Of course, Windows could not recognize it with the missing character. I restored the character, and Windows was happy again.

Dave's contention (and he is completely correct) is that these errors and extra files accumulate with time. He is also correct when he observes that neither we humans nor any existing program including Windows itself can keep track of the file creep and accumulating errors. After a year or two of heavy use, one can expect some subtle, unwanted changes to begin surfacing. The only recourse with a reasonable cost/benefit ratio is to completely wipe Windows from the drive and reinstall the whole shebang. Unfortunately, he is right again!

You don't usually need to erase and reinstall Word, or WordPerfect, or Paint Shop Pro (your application programs), as well. Although these all are open to damage too, none are as complex as Windows and the chance for damage is therefore less. Besides, when application programs are damaged, you generally know it right away, and about the only thing that happens is that the application doesn't work. Other programs are generally not affected. On the other hand, when Windows is bad, nothing works!

So then, how do you make the reinstall as painless as possible? Well, here is a tip I have found useful. Set your hard drive up with three partitions. Drive C contains nothing but Windows 95 or 98. Drive D contains nothing but your application programs. Drive E contains all your creations – letters, files, photos and so on. Now, when you do backups, you need copy only the stuff on drive E –the results of your hard work. If you need to reinstall Windows, it is only the files on drive C that must be replaced.

Now, use care! Make sure you have a boot disk handy that will allow you access to your CD-ROM drive and mouse. Test it to make sure! Then, in Windows, click Control Panel, then Add/Remove Programs. Scroll down to find Windows 95 (or 98). Click it to highlight it, and then click the Add/Remove button. Tell Windows you really do want it to uninstall itself. Reboot in MS-DOS mode with the floppy and make sure all folders and subfolders on the C: drive are gone. If not, delete the buggers. Use the good old DOS command from the root folder: `rd windows` (`rd` = remove directory, case insensitive). Don't forget that you can't remove a folder unless it is empty and contains no subfolders, so use `DIR` to navigate to the proper place for deletion to succeed. Now you are ready to fire up the CD-ROM for a sparkling new installation. Happy computing!