

# It's Just a Matter of Time...

BY BRAD HANSEN

It's just a matter of time until your hard disk crashes. Sound familiar? Still, we never think it will happen to us and may not be prepared. Last month my hard drive quietly disappeared. After unsuccessful attempts to recover data and three days of serious denial, I installed a new drive. It may have been the best thing that could have happened to my computer.

After repartitioning the drive, installing Windows 98, and restoring my primary applications, I've found my computer runs better than ever. I highly recommend that everyone go through this routine deliberately, after backing up everything of value. Here are the steps to take and some tips to help you along the way.

## Making a Bootable Startup Disk

A boot disk contains the essential files to start your computer. In the Control Panel select Add/Remove Programs, and click the Startup Disk tab.

With your Windows 98 CD in the drive, click Create Disk, and insert a floppy disk. A

boot disk is created automatically. The startup floppy includes CD-ROM drivers when it is made by Windows 98. In Windows 95 you must add the drivers manually to the boot disk. Now if your drive fails, you can start your computer and access a CD-ROM with the boot disk. You may be able to resurrect your hard drive, if it is not too badly damaged.

## Backing Up

There are several options depending on the media you choose. A basic backup program comes with Windows 98, which may be installed from the original CD and run from the Accessories/System Tools menu. If you have an Iomega Zip or Jaz drive, you already have the Iomega 1-Step Backup program. You can also download Norton Zip Rescue from the Iomega web site, which copies only the most critical system files onto a cartridge. To backup on CD-R or CD-WR, the Adaptec Take Two software is a good choice. Drive Image from PowerQuest works well with cartridge drives, such as Iomega or SyQuest, but not with tape or CD-R. Avantix Backup Plus is easy to use with most media, but does not work with tape drives. Remember that when you do a full backup with any of these

*After repartitioning the drive, installing Windows 98, and restoring my primary applications, I've found my computer runs better than ever.*

programs, you will be restoring the old disk image containing garbage you don't need.

## Reformatting

If you like to do things the hard way, use the FDISK utility in DOS. If not, use Partition Magic from PowerQuest. A functional version can be downloaded from their site. If you have a large drive, partitioning it into several volumes helps organize data. Partition Magic allows you to partition a drive without reformatting it, if you wish.

It is a good idea to convert your drive to FAT32 under Windows 98, if it is not already configured this way. FAT stands for File Allocation Table, and 32 means that you must be running a 32-bit operating system. The main advantage to FAT32 is that you can create clusters as small as 4 kilobytes (kB). A cluster can hold only one file, or part of a larger file. If you have a file that is 33kB in size, and your disk is formatted in 16 kB clusters, the file uses up three clus-

ters, and 15 kB of the third cluster remains empty. Multiplied by the thousands of files on your drive, this is a lot of wasted space. Use Drive Converter in the Accessories/System Tools menu to convert to FAT32. It is a good idea to backup before converting, and allow an hour or more for conversion. You cannot revert to the previous version of FAT. Some older utility software is not compatible with FAT32.

## Installing Windows 98 and Applications

Just follow the prompts to install Windows 98 from the CD. The increased speed is well worth the time it takes. As Windows runs, it accumulates a large number of .dll files and other unnecessary stuff in the registry. Installing the system anew rids it of this time-wasting, system-crashing junk. A friend of mine who works at Intel told me they routinely reinstall Windows every six to eight months, and it speeds everything up dramatically.

Using the original disks, reinstall just the necessary applications for the work you plan to do. Then copy from your backup disk the files you have saved and organize it well. You may have to hunt around for your email messages and bookmark files, but that's part of the fun. You will be amazed at how fast your computer loads Windows and runs applications.

## Worthwhile Plugins and Updates

The final step is to download the latest versions of software from the web. The Microsoft .com site offers an update to most of their software, including the latest version of Internet Explorer 5.0. I also recommend Quicktime 4.0 from Apple, and the current Macromedia Shockwave/Flash plug-in from Macromedia.com. It may take a day or two to get it all restored and configured. After you have most of what you need, defragment your drive and watch it fly!