

It's no fun when you lose your drive!

By Bruce A. Love

My computer crashed and I had to get a new hard drive. Is there any way to retrieve information from the hard drive that no longer works?

When a hard drive dies, there are varying degrees of death. The good news is that most hard drive deaths are recoverable situations. The bad news is that depending upon the amount of heroics needed to revive a hard drive, doing so can be quite costly.

The hard drive is the main storage device in the personal computer. It is a sealed unit that contains one or more rotating metal platters, or disks. The surface of each disk contains a magnetically alterable coating that is read from and written to as an armature navigates into positions above data storage locations on the disks. The disk rotates at a very high speed. The armature hovers so close to the surface of the disk that the diameter of a human hair seems enormous compared to the gap between a hard disk and the armature! The armature must never touch the rotating disk. If it does, you have a disk crash.

Disk failure may be imminent if you hear clicking, grinding, or some other unfamiliar sound coming from your PC. Backup your valuable data immediately if this occurs. The official death of a hard drive is usually confirmed when the computer is unable to locate the hard drive at startup, and announces this before Windows ever has a chance to splash across your screen. Once a hard drive dies, there still may be options.

If your computer indicates that it cannot find the hard drive at startup, turn it off, and try powering up again. Try this half a dozen times or more and hope that it will eventually fire up. If it does, immediately copy valuable data to a safe location on another storage device (CD-ROM, DVD, or another computer on the network). If it doesn't fire up, it's time to look under the hood to check for loose cables. [CAUTION : DO NOT put your hands into a computer that has power. Use anti-static

precautions when removing parts from a PC.] If that is not the answer, try making the suspect drive a "slave" to a "master" disk in another computer. Sometimes the change is enough to run it long enough to extract data from the failing drive.

Stiction (short for static friction) is a condition in which the armature becomes stuck to the platter. You can try removing your hard drive unit from your computer, placing it in a static-free plastic bag, and placing the bag in a freezer for at least an hour. This process can cause the metal to shrink just enough to dislodge the stuck armature. If successful, work quickly to remove all valuable data to another storage device, since it is likely that the drive will fail again as it heats up.

If all else fails, you may want to send your drive out for data recovery. One of the most reputable experts in this area is Iomega Data Recovery Services. They give free estimates and have an outstanding satisfaction rate, though their services are not cheap. The least you can expect to spend is about \$500. If they have to crack open your hard drive in a clean room, expect to pay considerably more. According to Ron Austin, Vice President of Marketing, the average cost for a space suited engineer to recover data in a clean room is \$1,200 to \$1,500. If the content of your hard drive is priceless, this is a bargain.

It is a fact of life that nothing in this world lasts forever. Be aware that all hard drives will fail some day. Get into the practice of backing up your important data files. Save picture files and other irreplaceable files to CD-ROMs or DVDs, and mail copies, in archival sleeves, to a friend for safekeeping. As the saying goes, an ounce of prevention is worth a pound of cure!

For more information about data protection and recovery, visit the Iomega Data Recovery Services website: www.iomegadatarecovery.com. While you are there, be sure to download their free guide: "Data Protection and Recovery Handbook"

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