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Road Warrior

Protecting Against Catastrophic Loss

By Jeffrey M. Allen

A couple of months ago, I received a telephone call from a friend of mine who lives in Texas. The caller, a General Practice, Solo and Small Firm Section stalwart, told me that he had a great idea for an article for the magazine: "What Do You Do After the Crash?" If the fact that this column appears in a technology issue of GPSolo didn't give away that my friend's reference was to a computer crash and not the stock market, I will let you in on that now. My friend's computer had crashed. He had not backed up his files and he wanted to know what he could do to recover them.

Mobile lawyers often do significant amounts of work out of their office. Serious road warriors have a much higher exposure to the loss of data than the occasional traveler or our office-bound counterparts. Laptop computers come equipped with extreme vulnerability to theft and to breakdown (special features included at no extra charge). Laptops offer a fertile breeding ground for disaster. They get banged around, tossed around, shoved around, kicked around, dropped, and occasionally stolen. While manufacturers have developed sturdier breeds of laptops lately, they still present a much higher risk than their larger, less-mobile desktop relatives.

The world of computer users can be divided into two groups: (1) those who have suffered through a catastrophic computer loss; and (2) those who will suffer through one in the future. What do I mean by a catastrophic loss? Your computer is lost or stolen, will not start due to hardware failure, or will not start due to a nonrecoverable software problem. You know the type, when you call the manufacturer's technical support and they suggest that you "zero out" the hard drive and reinstall the operating system and your software, so you call Microsoft technical support (Windows users have to make two separate calls; Mac users need to make only one) and they tell you the same thing.

Because this column focuses on mobile lawyers, I converted my friend's suggestion to a very important topic for the road warrior: How do you protect your work on the road? A number of basic steps immediately come to mind, some of which also will help keep your data secure on a desktop computer:

"Oh, &%\$@": The Three Catastrophes

To minimize the risk of catastrophic loss due to disappearance:

- Carry your computer in a bag that does not scream, "I am a computer bag; take me!"
- Use a cable lock to secure the laptop to a relatively stationary object when you have it out of the case. Most contemporary laptops have a slot for such a lock. The locks come in key and combination versions. I strongly prefer the combination as I am more likely to lose the key than forget the combination, but, to each his or her own.
- Keep your hand on the case when you are moving it through airports, train stations, hotel lobbies, etc. You may find that easier to do with a wheeled case with a handle that comes up to your hand when the case is stationary. That subsumes the requirement that you keep the computer in sight at all times in public areas.

I am always amazed to see people walk up to strangers in an airport lounge and ask them to "Please watch my computer while I run to the restroom/get a paper/make a phone call/get a cup of coffee." I have no idea how they know that the person they ask won't run off with the computer. Take the computer with you or that cup of coffee might prove quite expensive.

To minimize the risk of catastrophic loss due to hardware failure:

- Carry the computer in a well-designed, well-padded protective case or a well-padded computer insert if you choose a case not designed as a computer case.
- Do not plug the computer into an electrical system without using a surge protector.
- Do not toss the computer around or drop it like a sack of potatoes from six or ten inches off the ground when setting it down.
- Never check a bag with your computer in it—carry the computer with you.
- Carry a small computer tool kit with you to help prevent a minor hardware failure from disabling your computer.

To minimize the risk of catastrophic loss due to software issues:

- Acquire, install, and regularly use a good utility program such as Norton System Works (Mac or Windows) (www.norton.com).
- Acquire and use a recovery program such as GoBack (www.roxio.com) or the Windows ME "Restore" program (Windows) or Rewind (Macintosh) (www.poweronsoftware.com) to help you to recover from software-induced failures. These programs literally take your hard disk back to a better time and place, allowing you to undo an event that added a conflicting file or deleted a necessary file.
- Acquire and use a good virus checker (included in System Works, if you go that route; sold separately if you choose another general utility program). Set it to automatically check e-mail on arrival and removable media on insertion.
- Take an emergency software kit with you that includes an emergency boot disk and copies of your operating system, your critical programs, and your data.

Each of these suggestions will help reduce your risk, but nothing can or will guarantee that you won't have a catastrophic loss. So, what then? Well, there's one more thing that you need to do, both respecting your laptop and

your desktop computers: *Make and religiously follow a backup plan.* Protection of your data on the road begins in your office. Every good computer consultant and experienced computer user will tell you that a backup plan is critical to protect your data and your sanity. Your backup plan should include a regular backup of your entire hard disk (operating system, programs, and data). How often you do that depends on how frequently you add software or make changes to your system. If you make such changes often, you may need to back up the entire system weekly; otherwise, perhaps once or twice a month.

How do you back up your hard drive? Historically, tape backup drives satisfied that need. Today's external hard drives and replaceable media drives offer a good, if slightly more expensive, alternative due to their ease of use and comparative speed. Iomega's new Peerless drive (Macintosh and Windows) with firewire or USB connectivity offers an excellent option (www.Iomega.com). The Peerless media cartridges come in 10 GB and 20 GB capacities in a size and shape about the size of two standard decks of playing cards side by side. The cartridges come with protective cases and are quite light. The Peerless drive lists for \$399.95 with a 20 GB cartridge. Additional cartridges list for \$199.95 for 20 GB and \$159 for 10 GB cartridges. You can generally obtain discounts from the large computer warehouses.

The use of a high-capacity but petite external hard drive for disk backup makes it possible to take a duplicate of your entire disk with you when you leave the office, without a great deal of extra bulk or weight. I don't know many road warriors who do that, but it is not an unreasonable proposition given the small, lightweight, high-capacity drives now available. You may find that the critical nature of your travel and the information that you are carrying mandate exactly that approach. That way, in a worst-case scenario you reinitialize your hard disk or buy, rent, or borrow another computer and transfer your information to it immediately.

You will also want to back up regularly used data files on a daily basis. This allows you to protect each day's work. These daily data backups will require much less space than a backup of the entire drive. You can accomplish this procedure in a variety of ways, including the use of an external hard drive, the use of LS-120 (120 MB) superdisks or the more popular 100 MB or 250 MB Zip disks, or by burning a CD-ROM on one of the now quite common CD-RW drives that are available as small external add-ons or, in many cases, internal drives on laptop computers.

I have used Zip disks for the daily backup ritual for several years. It takes me about ten minutes a day to go through my backup procedures. I leave the office every day with two 250 MB Zip disks that contain my current month's billing and trust account information, current accounts receivable data, calendar and contacts information, and all the documents that I have generated in the course of my work for at least the last year. If you regularly work with larger data files and/or you are with a larger firm and keep the combined work product from all attorneys in common files, you will need more zip disks or another storage procedure, perhaps burning a CD-ROM or using a small external or replaceable media hard drive to accomplish the same thing.

This daily backup procedure has the added benefit for the mobile attorney of making it easy to ensure that you have the most current files on your laptop when you travel. You simply put the current backup disks into the laptop and transfer the files to the laptop immediately before you leave.

While on the road, you will need to back up the data files you work on regularly on a daily basis, possibly even more often, due to the higher exposure to loss. Once on the road, move every file that you create or work on to a travel folder (such as the desktop briefcase folder). Back up the travel folder to a zip disk at least once a day when on the road, more if warranted by the circumstances and the amount and importance of the work you have done. By the way, you might keep that zip disk in your pocket or in another bag, so that it's not with the computer, just in case. Of course, you could use a CD burner the same way and make a CD to back up your work.

If you want extra protection against the loss of your work, consider sending a copy of the file to yourself as an e-mail attachment. You may wish to encrypt the file, especially if the contents are sensitive. Don't forget that e-mail works both ways. If you have critical data that you will require on arrival at your destination, you can e-mail a copy to yourself as additional security that you will have it available in case you suffer a catastrophic loss on the way.

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