

### Disaster (Natural and Computer) Protection

Michelle and I went to the *Denver Museum of Nature & Science* recently to see the IMAX movie [Ring of Fire](#) (February 13 - June 11, 2009) and the exhibit [Nature Unleashed: Inside Natural Disasters](#) (February 13 - May 3, 2009). "From earthquakes and volcanoes



to hurricanes and tornadoes, nature's forces have shaped our dynamic planet. Throughout history, these catastrophic phenomena have affected people around the world." No matter where we live in this world it seems that nature has the upper hand. I starting thinking that disasters can come from nature and also from our technology. Such a simple thing as a hard drive crash can cause so much havoc to our lives. Being the computer geek I am I once again starting thinking about computer backups to protect us from natural and man made disasters.

### Hard Drive Crashes

Last year five (5) of my clients had hard drive crashes which required a complete reinstall of the operating system (Windows) all their programs (Microsoft Word, Picasa, Quicken, etc.) printer software, network setup, email settings and copying back from their most recent backup all their documents, pictures, email messages, email address book, Internet favorite places, etc. This is a big job which depending on how much there is to do can take 4-8 hours of work. Obviously this is a big hassle and a very big expense.

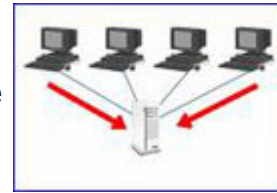


This happened to 2 Dell computers, 2 HP and one Toshiba, some desktop computers and some laptops. Some were less than a year old and others were a few years old. Some were Windows Vista and some were Windows XP. There were different hard drive manufacturers so no one computer company or hard drive manufacturer were to blame. There seems to be no rhyme or reason as to why this is happening more often these days. This type of hard drive crash used to be very rare (maybe one per year for my business) but now seems to be happening with greater frequency.

### Complete Hard Drive Backups

Traditional backup software usually only backs up your important data, not the entire hard drive. Therefore I have now come to the conclusion that everyone should have a complete hard drive backup to facilitate restoring

a failed or destroyed hard drive. There is special software (\$25-50) that makes an "image" (an exact copy) of the entire hard drive to another hard drive. This other hard drive can be a simple USB external hard drive (\$80-100 if you own just one computer) or a network hard drive (~\$160 if you have a home network and want to backup more than one computer). This software can be setup to automatically backup in the early morning hours and run all by itself.



## Off-Site Backups

One problem with the complete hard drive backup solution above is the lack of off-site protection. God forbid your house or apartment building burns to the ground your computer and the backup drive would go with it. Therefore we also need to backup off-site the information that can not be replaced.



(Note: It is not really necessary to keep an entire hard drive image off-site because if you lost your entire computer you would have to replace the computer with a new one and in that case we would only copy back your personal information from your backup to your new computer.)

Two ways you can accomplish off-site backup for your irreplaceable information:

1. Use an online backup service similar to [Mozy](#) which is done through the Internet (free up to 2 GB of information, \$60 per year unlimited).
2. Use a USB flash drive and [SyncToy](#) to select the folders you want to backup and keep it with you at all times or rotate two USB drives into a safe deposit box (not a good option for digital photographers since digital pictures will quickly fill USB flash drives.).



## Conclusion

Over the years as technology has changed I have setup many different types of backups. First it was floppy disks, then tape drives, then Zip disks, then CD/DVD disks and then USB drives. Now I think a combination of a hard drive image to an external drive and an online backup of your important information provides the best combination of protection and ease of use. In the last few months I have setup a number of my clients with this combination. If we have not talked about your backup routine for a while be sure to ask me about it if you are unsure. Let's all protect ourselves now and hopefully we will never have to use it.

If you decide to take a chance now you will have an option later. If disaster strikes you can always send your hard drive in to a company that specializes in retrieving data.

See the following video on [Hard Drive CPR](#):



### Online Backup for PC and Mac:

Mozy: <http://www.mozy.com>

### Image (copy) a PC Hard Drive:

Acronis: <http://www.acronis.com/homecomputing/>

### Image (copy) a Mac Hard Drive:

Carbon Copy: <http://www.bombich.com/software/ccc.html>

Super Duper: <http://www.shirt-pocket.com/SuperDuper/SuperDuperDescription.html>

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