

## To backup or not to backup?

### *It's not really a question*

Backups are the designated drivers of the computer world. They never get any respect and you only realize how important they are after you have had an accident. Just for a moment think about what you have stored on your computer. For the lucky few it may just be vacation pictures and your iTunes music library. Others will have critical data stored like:

- Tax information
- Client lists
- Business emails
- Contracts
- Jessica Alba's phone number (we can dream)

We have had customers come in days before their taxes were due with no backups and a dead hard drive, frantically hoping that we can restore their data. Some people are not aware how easy it is for a hard drive to fail and how common of a problem it really is. A few things that can cause a crash are:

- Lightning damage or a power surge
- A physical shock (no matter how large or small)
- Old age (3 hard drive years is about 60 human years)
- A boot level virus (although this is extremely rare)

In many situations where a computer isn't bootable anymore, we can still retrieve the data off the hard drive. If we are unable to retrieve data from a failed hard drive, it is still possible to send it to a data recovery specialist, such as Ontrack. Unfortunately, such services could cost thousands of dollars and success isn't guaranteed. Preventive backups are definitely the way to go and are not very expensive considering the alternative. Let's discuss a few of the most common.

A **USB** stick or **Thumb Drive**. These are the little pieces of plastic that look like a pack of gum. They come in various sizes ranging from a few megabytes to over 15 gigabytes. Perfect for manual backups and portability.

#### **PROS:**

- Reusable and easy to use no matter your skill with computers
- Cheap. most models will be well below 50\$
- You can backup your important data and take it home with you for off site backup or store in a fireproof safe on site.

#### **CONS:**

- They are small and fragile so they could be lost or stepped on
- They do not have a capacity for larger backups

A **CD** or **DVD** is still a standard for many people wanting to backup their data. They are a useful media but you should think of them as disposable for the purposes of backing up. There are rewritable CD's, but they are much more prone to errors and degradation than a one use CD.

#### **PROS:**

- Easy to use and they can be found at just about any store within walking range
- The CD's can hold about 650 Megabytes and the DVD's can hold about 4.7 Gigabytes.

**CONS:**

- Storage and organization, since after a while you will have heaps of these disks
- They are fragile and can crack or break.
- For more advanced backup procedures you will need a more robust program to "burn" the data to the disk than the one included in windows
- You will find the occasional bad disk that will not store data and the burn program will sometimes fail

The **External hard drive** is basically a hard drive in a plastic or metal enclosure that you can connect to your computer using various methods, USB being the most common. Newer models can store as much as 2 Terabytes of data and the transfer rate is much higher if has an E-Sata or firewire connection. This solution is usually recommended as a standard backup for most small businesses.

**PROS:**

- Storage capacity and ease of use are the biggest factors but there is one other benefit. With the right software these Hard Drives will allow you to automate your backups. For example, you can set it up to backup the contents of your hard drive or just a few important files every Friday night at 2 A.M. That way your work flow is not interrupted.
- Portability, if it is needed, you can just unhook the drive and take it anywhere you need to go.

**CONS:**

- Can be damaged in the same ways as a standard hard drive but is even more vulnerable since it is not protected by the computer's casing
- It is a more expensive option varying between 100\$ up to 500\$.

There are several companies that offer a service where you backup your information to their network for storage. This is what we call **Remote or Off-site Backups**. There are remote backup solutions for the individual user as well as large companies. It is best to let an IT professional setup these systems as there are many ways for things to go wrong if you are not familiar with the process.

**PROS:**

- Your information is off-site so your company could burn to the ground but your data would be safe and sound.
- In most cases, you can access the data from any computer with an Internet connection
- Setting up an automatic backup system is usually much easier with this setup

**CONS:**

- Depending on the company you use and the amount of data you need backed up, it can get expensive
- No matter how secure it is, some people are uncomfortable with their company or personal data being stored by on another company's server
- If you have more than a few gigabytes of data to backup, your initial backup may take several days to complete

If you haven't set up a system for backups yet I hope I have given you food for thought and if you are not sure how to get started, please call us at PC Co-Pilots. We would be glad to talk to you about your backup needs and setup an appropriate solution for your situation.