



## Computer Backup: Protecting Your Data

Most people have done it – deleted a file that they did not mean to delete and then frantically attempted to retrieve the information. In a worst case scenario a computer has crashed or been subject to a virus causing the loss of files of important data, effectively wiping out hours and hours of work. How do you make sure that your data is protected when faced with such occurrences?

If your files are not expendable, then making backup copies should be part of your regular routine. It is a simple procedure and one that can save you a lot of time and headaches. You do not need to make backups of the actual programs such as Word or Outlook as those are already available on separate CDs.

There are several options for backing up your data. You can use CDs, DVDs, USB external hard drives or an online storage program.

### Storage Space

The average CD-ROM holds 600 to 700 MB. There are 1000 MB in one GB, so you will have to calculate how many CDs you will need for the entire back-up based on your hard drive capacity.

If using a USB hard drive, purchase one that has twice as much space as your computer so you have room for multiple backups or additional information.

Online storage program, for example, Windows Live SkyDrive offers 25 GB of free storage space.

### Using Windows & Mac Systems with an External Hard Drive

Both Windows and Mac offer backup capabilities. Simply plug in the external hard drive and follow the prompts.

Windows has a backup feature called Backup and Restore. With this feature you can decide whether to backup all your files or just select the ones you want. In Windows 7, just type in Backup in the Search box, then click the item in the results list.

In Mac you can go to System Preferences then Time Machine and continue to follow the instructions.

Keep in mind that storing your data on CD-ROMs or a USB, while effective, will not save your data in case of complete destruction such as a fire. For more destructive-proof backup, consider using an online storage program.

### Online Storage

There are a number of services that offer online storage for your files – some are free and some have a charge. With online storage you can retrieve your files any time on any computer. With certain programs you can also share your files or work online with others.

### **Cloud Storage**

Cloud storage is a type of service model wherein data is maintained, managed and backed up remotely. The hosting company provides the storage space to buy or lease. The data is then made available to users over a network (typically the Internet).

You will be able to sync, backup and access your files from multiple places as well as share documents with others.

There are three main models of cloud storage:

1. **Public Cloud:** provides for a multi-tenant environment that works well for unstructured data. An example of this is Amazon's Simple Storage Service (S3)
2. **Private Cloud:** provides for a dedicated environment that is protected by an organization's firewall. This is appropriate for users who require customization and more control over their data.
3. **Hybrid Cloud:** combination of Public and Private models. As an example, a company may choose to store more actively used and structured data in a private cloud and unstructured and archival data in a public cloud.

### **Schedule regular backups**

Depending on how often you use your computer and how much new data you input, a daily or weekly backup is a good idea.

Finally, before putting your complete trust in any backup system, make sure that it works. Copy a couple of files through your chosen method and then ensure that you can retrieve them completely.

In any case, by following simple backup procedures, you can find yourself saving valuable time and money in case of computer disaster.