

Question: How often should I backup my computer?

Answer: It depends.

As computers become more and more integrated into the fabric of our lives we have a tendency to take them for granted. We take for granted that they will always work. We take for granted that they are secure. We take for granted that the information we store is safe. Nothing could be further from the truth!

The two most common computer failures are power supplies and hard drives. Both are relatively easy to replace. However, the documents, pictures, financial information, etc stored on the hard drive can typically only be restored if you have some type of backup.

How often you backup and what type of backup you perform depends on your individual situation. The question I ask is, "How much can you afford to lose?" Full backups of all data and system files provide your highest degree of protection. In this scenario all of your data files, program files, and system files are backed up in one complete set. If you have a system failure the complete system can be restored from this backup set. Full backups require large storage resources and sometimes take long periods of time to complete.

Incremental backups store changed items only. This type of backup strategy requires that you first do a full backup followed by incremental backups. For example, you might do a full backup on Monday, followed by incremental on Tuesday through Sunday. If you suffer a system failure, you need all seven media (tapes, CDs, DVDs) to fully restore your system.

Another question you need to ask yourself is, "Where should I backup to?" Many businesses have a dedicated backup server that has some type of tape backup device. Typically this backup scenario is automated so that backups are run "auto-magically" each day at a scheduled time. Because the backups can only be created and restored from this particular computer, this computer is mission critical and should be a high availability, fault tolerant machine.

If you have smaller amounts of information to save, backing up to a CD has the advantage of transportability. Meaning you can take that CD to virtually any other computer and restore the information. CDs can only store small amounts of information (750MB). DVDs are becoming popular backup devices because they are transportable plus they can store larger amounts of information (4.7GB). The downside to CDs and DVDs are limited storage space and their susceptibility to being damaged. Because they are transportable, they can easily be lost or damaged during transport.

Now that high speed internet is available to Grand County residents, we also have the option of remote backup services. There are many online backup service providers that, for a fee, will backup your computer via the internet. Typically these services install some type of client software on your computer. They initially store a full backup of your computer on their backup server. Then the client software monitors changes and

subsequently does incremental backups to the remote server. If you have high speed internet, this can be a good solution.

If you completely neglect any form of backup and suffer a hard drive failure you may have one last resort. There are data recovery services that, for a very large fee (minimum \$1000), will attempt to recover your data. These services typically disassemble the failed hard drive and reassemble the drive with new components. If the disk is not too badly damaged, they can sometimes recover your information.

When discussing backups, one of the most difficult things to get across is “value”. When we use terms like “data” and “information” we can become desensitized to the “value” of the data we’re trying to protect. So, let’s rephrase this and use terms like “pictures”, “memories”, “money” because that is what our data is. Pictures of the grand kids, memories of that Caribbean vacation, and hours spent creating a job proposal are what we really lose when we do not backup and protect our “data”.

Happy computing!