

Avoiding the Ohnosecond

- the good sense of making backups

Most computer users will have experienced an 'ohnosecond' – the moment of realisation that a misplaced mouse click, a typing error, a power cut or other system failure has just deleted a vital file. All too often this is followed by a belated interest in the subject of backups. A survey in 2000 of university staff and students found that although 90% of users thought backups were important (50% admitted to losing work through not having them), still only 30% took regular backups of their files. Clearly we are not very good at learning from our own mistakes!

These figures might suggest that taking backups is hard, but in many cases it is almost trivially simple. Many organisations have a central backup service, which can be joined by completing a form, making a small payment or merely storing files in a particular location. A well-run central backup service is a huge benefit both in time saved when things do go wrong and in peace of mind when they do not. If your organisation has a service that you can learn how to use then there are few arguments for doing backups any other way.

If you do have to make your own backups, then there are a number of options depending on the amount of information to be saved and the length of time for which it may need to be kept. Tapes, high-capacity removable disks and writeable CD or DVD-ROMs are all routinely available for most desktop machines. Good quality media should always be used. Catalogue and store the backups in a safe, ordered fashion so the correct one can be found when required. If sensitive information is being backed up, then ensure that the backups are stored as securely as the originals. If critical information is being stored that would be needed after a physical incident such as a theft, fire or flood, then consider keeping some backups in a different location. Above all, make sure backups are taken at appropriate times to give the best chance of preserving information. Backups taken at the end of a working session give better protection than those taken at the start.

Whether you make your own backups or subscribe to a central service, the protection will be of little use if you cannot recover files quickly when things go wrong. It is much easier to learn how to retrieve files calmly, before it becomes a matter of vital importance. The most obvious test, though all too often forgotten, is to check that files are actually being written to the backup tape or disk and that they can be read back from there. One site collected "backup successful" messages for six months before discovering that, due to a programming error, the precious tapes were in fact blank.

Summary

These six steps can help you avoid the 'ohnosecond':

- join a central backup service if you can and always use it;
- if a central service is not appropriate, plan your own backups;
- get enough suitable backup media;
- plan time to backup at the end of a session;
- check the backup has worked;
- label backups and store them safely.

Backups cannot eliminate the terrible sinking feeling when things go wrong, and they cannot always guarantee to recover the very latest changes to a file. Simple precautions can, however, considerably reduce the anguish. Happiness, as Charles Schultz nearly said, is a drawer of fresh backup tapes.

For More Information

First contact your central IT Service to see if they have a backup service that you can join.

If you have to make your own backups on a Windows® system, Microsoft® have instructions for using their Backup program at: <http://support.microsoft.com/?kbid=308422>

For UNIX systems there is a very good course module written by Indiana University UNIX Workstation Support Group and published at: <http://uwsg.iu.edu/usail/library/backups.html>