

PC Backup Strategy



PULBOROUGH COMPUTER CLUB

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Scary Stories



- I've never backed up and I've never needed to
- My PC has kept working for years
- I can't be bothered with the nuisance
- I've got a warranty on my PC
- I don't use the PC for anything important

The Reality



- Backup should not be a choice
- PCs are inherently unreliable – they can be damaged by hardware failure, software corruption, overheating, virus infection, lightning strike..
- Backups need not be hard work
- The PC warranty means nothing
 - All major vendors will wipe the HDD
- Everyone has something to backup

Backup Top Tips



- **Protect all data**
 - Much of your data is hidden
- **Backup often**
 - Don't think an annual backup is OK
- **Dragging & dropping is dangerous**
 - You will miss something hidden
- **Not just documents**
 - If you have more than a dozen programs

Top Tips Continued



- **Use Open File Backups**
 - If you don't, certain system files will never be backed up
- **Make multiple copies**
 - Paranoia is a good thing!
- **Devise a strategy**
 - Calculate the size of the backup and design the backup to fit
- **Don't Procrastinate**
 - Disaster is about to strike!

Backup Hardware



- CD, DVD or Blu-Ray (manual process req'd)
- Zip, Rev or similar (OK, but proprietary)
- Spare internal hard drive (OK)
- External hard drive (OK)
- NAS (Network Attached Storage) (OK)

Backup Hardware Guide



- Try and avoid a manual solution
- To be automated the backup media must be permanently available
- Hard drives are cheap, fast & reliable (ish)
- External hard drives are cheap (often cheaper than internal drives)
- NAS boxes are fairly expensive, but coming down in price

Hardware Recommendation



- Based on price, availability, ease of installation
- Hard drive (external), check connection type
 - USB 2.0, Firewire 400 or 800, eSata
- Hard drive (internal)
- Network storage
- CD or DVD (if you must)

What I Use



- Internal hard drive (as data store for easily replaceable data – games etc)
- External hard drive(s) – for entire C drive backup
- CD or DVD for duplicates of important, irreplaceable data, if it changes infrequently

Backup Software



- Dozens of programs, few of which are free
- Decide on the type required
 - Drive image software (e.g. Acronis True Image)
 - Open file backup software (e.g. emc Retrospect, Veritas.....)
- I use Acronis True Image as it is the most flexible
- If you buy an external hard drive it may come with backup software (but often it's pretty poor)!

Partitioning (or not)



- Hard drives are so cheap that it is no longer necessary to separate data for economic reasons
- Creating separate partitions for data is easy if you go for partitioning software that is Windows (not DOS) based: I recommend Partition Manager (now owned by Symantec)
- Do you really want to load all your programs again?
- I recommend backing up the whole hard drive and forgetting partitioning

Backup Frequency



- If you use your PC daily, do a daily backup
- If the process is automated, run it at a time when you're not usually in the middle of something
- If you use the PC infrequently, judge the frequency accordingly
- If you do manual backups to CD, don't put it off (again)

Restoring Data



- If you haven't tested a restore, you potentially have no backup
- All backup programs include restore functionality – test it
- If the program has a disaster recovery option use it, even if it is a bit of a drag doing it!
 - Some programs require XP disc
 - Acronis creates a standalone bootable disc to point at the image file

Online Backup



- Backup to a remote server
- Advantages
 - As secure as the company you backup to
 - Ease of restoration
 - Relatively low cost
- Disadvantages
 - Make sure you trust the company you use for backup
 - Very slow initial backup (upload times are far slower than download)
- www.carbonite.com

Program Demos



- **Acronis True Image**
 - For day to day backup & image creation
- **Microsoft SyncToy v2.0 (beta)**
 - For specific folder synchronisation
- **Pixelabs XXCopy**
 - Command line tool for disk cloning
- **Roadkil's Unstoppable Copier**
 - For copying an unreliable, or faulty, disk