

Backup - Protecting Your Data



DANenet Technical Round Table - Nov. 15, 2005

Backup - Different Types

Disaster Recovery: protecting against hardware failures (server “melt down”, dead hard drives) Having the most complete and most recent backup is important.

File Recovery: protecting against human failures (careless file deletion, file corruption) Having the most versions of the same file is most important, not necessarily the most recent.

Archiving: protecting against obsolescence. Having the most complete and organized filing system is most important.



Backup - DAT/TAPE

Pros: Can keep multiple backups in multiple locations, can be automated.

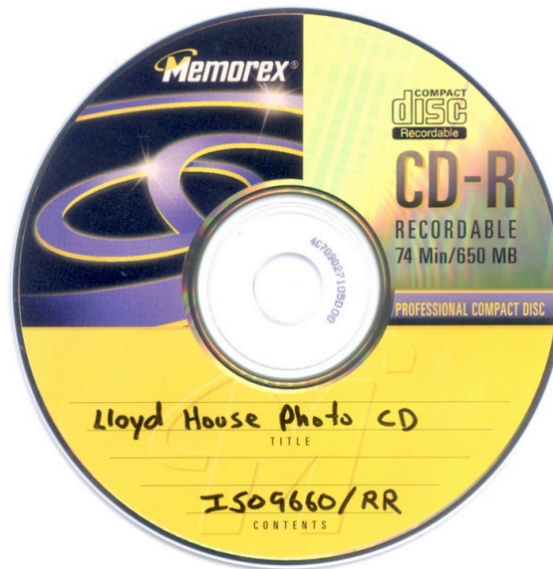
Cons: vulnerable to magnets, deteriorate over time (important to check them regularly), slow, expensive (40GB Travan tape = \$35+, 40GB Travan drive = \$200+)



Backup - DVD/CD-ROM

Pros: moderate price (\$2-\$3 a disk, <\$100 for a drive), potentially simple to use.

Cons: low capacity (700mb per CD, 4.1gb per DVD) fragile, potentially short lifespan (some reports: as little as 1-2 years for DVD-RW)



Backup - External Hard Drive

Pros: Large capacity (can usually hold several backups), simple to use, inexpensive (per GB) (250GB = \$150+, 120GB = \$90+)

Cons: more difficult to keep different backups in different places, slow backups if not USB 2.0 or Firewire



Backup - USB Flash Drive

Pros: small, simple to use, pretty good data retention (up to 10 years?), not vulnerable to magnets, fairly sturdy (depends somewhat on brand)

Cons: low capacity (<4GB), more expensive (1GB = about \$60-\$70, 4GB = \$250-\$300)



Backup - Internet

Pros: no hardware to configure, only requires client software and a fast internet connection, backups may be available remotely

Cons: requires a monthly or annual subscription fee and a fast internet connection

FREE OPTIONS:

- **Mozy** (<https://mozy.com/>)
- **X-Drive** (<http://www.xdrive.com/>)



Backup - Appliance

Pros: no software to configure, only requires client software, backups may be available remotely

Cons: costly, limited features, upgrade path?

Example:

•Mirra Personal Server (<http://mirra.com/>)



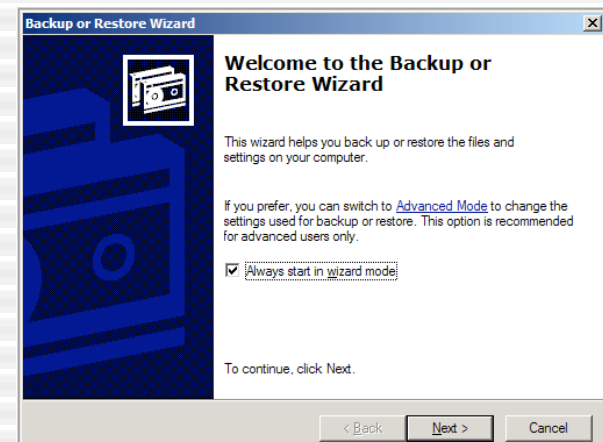
Backup - Software

Windows Backup: free backup utility found in every copy of Windows, schedulable, easy-to-use. Not sophisticated, pre-Windows XP won't burn to CD

Veritas Backup Exec: popular, sophisticated but more complicated compared to Windows Backup.

Open Source/FREE: price is right but may be lacking in features and instructions-

- **Backup PC** (<http://backuppc.sourceforge.net/>)
- **Back2zip** (<http://free-backup.info/>)
- **JustZIPit** (<http://free-backup.info/>)



Backup - Tips

Multiple Backups: don't rely on one backup media, rotate often

Offsite: protect your data from theft or fire - rotate your media to another location

Test your Backups: don't wait till you need to recover files only to find out the backups are worthless

Don't Setup and Forget: periodically verify (by date) your backups to ensure they are happening

