

The logo is a circular emblem with a gear-like outer border. Inside, a stylized rocket or arrow points upwards and to the right, set against a background of a globe or sphere.

Software Educational Resources Ltd

Backup

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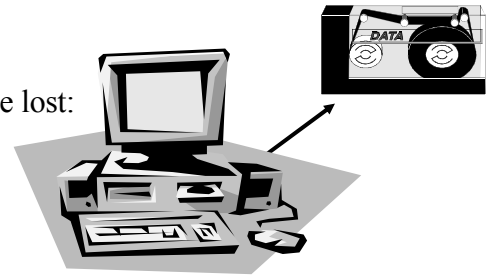
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Backup

Backing up your work is necessary because valuable data can be lost:

- A hard disk can break down or collapse
- Computers are a target of theft
- Fire damage can destroy your hard disk.



Backup versus Copy

The difference between **copying** your files and **backing up** your files is that when the files are copied, the actual file is transferred to a disk. Files that are copied can be used by simply working from the disk. Copying is a slow process and takes up copious disk space. However, copying can be an effective backup procedure when used with Zip or CD Write drives.

Files that are 'backed up' are compressed and the backup process is a safeguard or "insurance". The files are squeezed into one file and they cannot be used from the disk. They must be "restored" to your hard disk.

Compression programs

Programs are available (such as PKZIP or WINZIP) that compress files on disk which is useful when you want to copy a large file that will not normally fit on a disk.

Backup methods

- Tape Backup - where provision is made for a tape system in a slot above (or below) your floppy disk drive. A backup program is installed on the computer and backup is done to a tape that is inserted into the tape drive. Automatic backups can be set, ie the backup is programmed to be done on certain days at certain times.
- Using a CD Write drive and copying data onto CD ROMS.
- Using a zip drive where data can be copied onto zip disks which can store large amounts of data.
- Backup programs designed only for doing backups, eg Fastback or a backup program that may be part of another program, eg Windows 95/98 Backup (Choose Start, Programs, Accessories, System Tools, Backup) or Nortons Utilities.
- DOS backup.

Advantages of a Backup program

- 1 Random folders can be selected and/or random files can be selected.
- 2 The computer can be programmed to backup automatically.
- 3 Backup "sets" (ie folders and files you have chosen) can be saved as a file and then that file can be selected for backup.
- 4 Files are compressed and take up minimum space, eg through DOS a backup may take 17 disks but with a backup program it may take only eight.
- 5 The backup can be verified, ie confirmed.
- 6 The backup disks are checked before the backup procedure commences.
- 7 The backup process is easier and reduces errors in the typing of commands.

When to backup files

On Disks

Whichever method is used, backups should be done on a regular basis. Three sets of disks for backing up should be used (called the Grandfather, Father & Son backup method):

- 1 Backup on the first set the first week (or daily if necessary)
- 2 Backup on the second set the second week
- 3 Backup on the third set the third week
- 4 Backup on the first set the fourth week
- 5 Backup on the second set the fifth week
- 6 Backup on the third set the sixth week - and so on.
- 7 Mark the disks with the dates of the backup.

On Tape

It is advisable to use four daily tapes and rotate them each week. Also use a different tape for each Friday.

- Backup files each day on daily tapes, which are reused each week.
- Do a full backup each Friday, using Friday 1 to Friday 4 (or 5) tapes.
- Repeat for each week of the month.

(You can also use a monthly tape if desired which would be archived)

For important work it is also advisable to hold another set of tapes (or disks) off site.

July 1998

Mon	Tue	Wed	Thu	Fri
		1 Wednesday Tape	2 Thursday Tape	3 Friday 4 Tape OR Monthly Tape
6 Monday Tape	7 Tuesday Tape	8 Wednesday Tape	9 Thursday Tape	10 Friday 1 Tape
13 Monday Tape	14 Tuesday Tape	15 Wednesday Tape	16 Thursday Tape	17 Friday 2 Tape
20 Monday Tape	21 Tuesday Tape	22 Wednesday Tape	23 Thursday Tape	24 Friday 3 Tape
27 Monday Tape	28 Tuesday Tape	29 Wednesday Tape	30 Thursday Tape	31 Friday 4 Tape OR Monthly Tape

Backup System Maintenance

You must ensure that your backups are usable should you need to restore them. Backup system maintenance must be undertaken. If you are using a tape drive, make sure you clean it with a cleaning tape periodically. This prevents errors occurring in the drive and prolongs the life of the drive itself.

The most important area of maintenance is to always compare your backups from tape to hard disk, ie the backed up files against the originals. This Compare feature is always an option/command within any backup program.