

3 Storage Devices and Media

Media	Use
Floppy Discs	Any use where small files such as word processing, small spreadsheets and databases need to be moved from one computer to another. Useful to backup small data files.
Fixed hard discs	Used to store operating systems, software and working data. Any application which requires very fast access to data for both reading and writing to. Not for applications which need portability. Used for on-line and real time processes requiring direct access. Used in file servers for computer networks.
Portable hard discs	Used to store very large files which need transporting from one computer to another and price is not an issue. More expensive than other forms of removable media
Magnetic tapes	Any application which requires extremely large storage capacity and speed of access is not an issue. Uses serial access for reading and writing. Used for backups of file servers for computer networks. Used in a variety of batch processing applications such as reading of bank cheques, payroll processing and general stock control
Optical backing storage media such as CDs and DVDs	CDs tend to be used for large files (but smaller than 1Gb) which are too big for a floppy disc to hold such as music and general animation. DVDs are used to hold very large files (several Gb) such as films. Both CDs and DVDs are portable i.e. they can be transported from one computer to another. Both can be used to store computer data.
CD ROM/DVD ROM	Applications which require the prevention of deletion of data, accidental or otherwise. CDs used by software companies for distributing software programs and data; by music companies for distributing music albums and by book publishers for distributing encyclopaedias, reference books etc. DVDs used by film distributors.
CD R/DVD R	Applications which require a single 'burning' of data, e.g. CDs – recording of music downloads from the Internet, recording of music from MP3 format, recording of data for archiving or backup purposes. DVDs – recording of films and television programs.
CD RW/DVD RW	Applications which require the updating of information and ability to record over old data. Not suitable for music recording but is very useful for keeping generations of files. DVDs have between five and ten times the capacity of CDs.
Solid state backing storage	Physically the smallest form of memory, used as removable storage. More robust than other forms of storage. More expensive than other forms but can be easily written to and updated.
DVD-RAM	Same properties as DVD RW but quicker access and data can be overwritten more easily. Similar to floppies in nature but has 3000 – 6000 times more storage and uses optical technology
Blu-ray	Capacities of 25Gb, 50Gb and 100 Gb. Used for storing films (movies). 25Gb equates to 2 hrs HDTV, 13hrs standard definition TV. It is possible to playback video on a disc while simultaneously recording HD video. (Will be) used for storage of PC data.
HD DVD	Capacities of 15Gb, 30Gb and 45 Gb. Less capacity than Blu ray. Used for storing films (movies). (May be) used for storage of PC data.
Memory sticks Pen drives	Can store up to many Gb. Used to transport files and backup data from computer to computer
Flash memory cards	Used in digital cameras, palmtops, mobile phones, MP3 players
Minidisk (Hybrid media)	Magneto optical method or writing data. Used for storing music. Can store up to 140Mb.