



English

Storage of data

A computer uses either internal or external storage to save data. Hard drives are usually available internally for a machine to store the operating system, any applications installed and the data for each user of the system. A drive can be a disk drive with rotating magnetic disks or a solid state disk (a silicon device without any moving parts). To allow for extensibility and portability external hard drives and other devices are available to store and transport information.

Hard drive partitions

As technology progresses storage devices are ever more increasing in capacity. Storage levels nowadays allow for very large capacity drives to be installed on machines or even carried externally. The information on a drive is written in what are known as partitions which are sections of the storage device able to store data.

A drive can have one or more partitions which can store different and distinct data, even referring to different operating systems. A dual boot system can include a number of partitions and one can have windows installed while another can have Linux installed. A Boot loader software intervenes when the machine boots up and the user can select the operating system they want to run.

It is common practice to have a number of partitions on a storage device. This can assist with the organization of files on the disk. For example you can have one partition with the operating system and applications, another partition with all documents and office related files, a third partition with photos and videos and a fourth partition for games.

Additionally, using multiple partitions can even help protect one partition if another partition gets corrupted and becomes unusable (or even worse inaccessible). Lastly, it is possible for more experienced users to 'hide' partitions or 'encrypt' partitions when they don't want any un-authorized access.

Managing partitions

There is a variety of software available (free or paid) that allows users to manipulate internal or external drives. This type of software is called a Partition Manager software and provides a large set of instructions for creating, resizing, making copies, moving, recovering, deleting, changing, checking, formatting, converting as well as measuring performance of drives.

Examples of free partition manager software (with respective links) are listed below:

[EaseUS Partition Master Free](#)

[MiniTool Partition Wizard](#)

[GParted Disk Partition](#)

[Paragon Partition Manager](#)

[AOMEI Particion Assistant](#)