Optical Storage Devices

With the increasing demand for memory in a computer, there never seems that computers will have enough memory. This phenomenon is due to increased development of larger applications. This need to store and retrieve large amounts of data has given rise to the Optical technology, which is capable of creating storage devices which can store more than 100 times the capacity of Magnetic Disks. Optical Technology involves the use of Laser Beams that are highly concentrated beams of light.



Optical disks are similar to the laser-optical Video disks which are sold for home use. The data on the optical disk is stored as a digital data. To store data laser beams are used to burn the microscopic "Pits" to represent Binary digits i.e. Os and 1s. These pit patterns represent data. These disks are read using the optical disk drives that use laser beams to read Pit patterns and convert them into bits.

Optical disks usually come as Read Only and are usually used to store programs, utilities, software, data etc so that one can read the contents and carry on required work. These disks are capable of storing tremendous amount of data. Erasable Optical Disks are the disks, which are erasable and can be reused. These disks are extensive. These disks can be written onto with help of CD-Writer.

The types of Optical Storage media include, <u>Compact Disks with Read Only Memory</u> (**CD-ROM**), Write Once, Read Many compact disks (**CD-WORM**), Rewriteable Compact Disks (**CD-RW**), and <u>Digital Video Disks with Read Only Memory</u> (**DVD-ROMs**).