The File and directory management

Objects in os/2 :- object desktop for os/2 is an advanced desktop Environment. It uses IBm's system object model (som) and the workplace shell (WPS) to add features, power, ease of use, and performance to the base operation system. object desktop is targeted at all users of os/2, but particularly those on small networks and in the home. object desktop is like a third-party upgrade to os/2.

object desktop is represented by Icons In os/2 is clal called an object. and all of them fall into one of the three general categories. And when new versions of os/2 are introduced to the general object desktop will automatically inherits those new features and extend them as well.

Files in os/2 :- There are three general categories of files they are.

* A real File is something that physically takes up space on disk. It can be an executable program file. a word proccessor document, a bitmap. etc.

* An abstract object doesn't take up disk space, except insofar as it uses an entry in the system file. some abstract objects don't have a visible representation, and therefore

don't concern the user; but many of them occur as desktop icons with properties notebooks.

* The abstract objects that is most likely on a desktop is a Program object. That, in effect, is a pointer to an executable Program file, A shadow is a pointer to a real file or a pointer to an abstract object.

Directory in os/2 :- A directory is a location for storing files on the computer, In os/2 directories are found in a hierarchical file System, c the drivers, folders, and the user to see in groups, which allows the user to see in the group only the files they're interested in seeing

System and management :- while providing support for many different file systems, os/2 wrap prefers IBM's proprietary High performance file system (HPFS), which implements the operating System's native file management functions.

HPFS provides all the standard file management functions such as opening/closing, creating/deleting, and reading/writing files and directories, as well as proving some file security and other functions via various file attributes.

HPFS uses the directory organization of FAT, but added automatic sorting of the directories based on filenames. Filename length was extended to up 254 characters. It offers resistance to file fragmentation, improved media error handing and smaller cluster size. HPFS also allowed a file to be composed of 'data' and special attributes to support other naming conventions and security. In addition, allocation, units, were changed from clusters to physical sectors, reducing lost disk space.

OS/2 wrap's High performance file system clearly offers same advantages features concerning its file management options and performance capabilities.

File data structure: OS/2 warp implements its nature file system through various data structures including Flo & nodes, sectors runs, B+ trees, and B- trees, each which plays an important role in the high performance of HPFS. Every file or directory is fixed on a data structure called Fnode. The Fnode is the first sector allocated to a file or directory. Each Fnode contains control and access control lists, the file length, the directory name and an allocation structure, which defines the size and location of the files or directory name, and an allocation through a collection of sections of contiguous bytes.

called sector runs (Frommend).

os/2 warp's file data structures including Fnodes, sector runs, B+ trees, and B-trees allow for quick, efficient implementation of operations on files and directories, providing a vast improvement in file system performance.

Scheduling:

The corner stone of a multiprocessing operating system is the scheduling. scheduling insures. that every process has a chance to perform it task on the cpu. The os/2 uses a preemptive scheduler to handle its multiprocessing ability. The priorities PSTat, entered at the command prompt, allows the users to get information about the processes that are utilizing the cpu. Information such as, which process and how long they are utilizing the cpu.

System calls: The interface invokes intended system call in os kernel and return status of the system call and any return values. File management is a type of system call used in os/2.