

USER INTERFACE:-

i) Graphical user interface:-

GUI is a form of user interface that allows users to interact with electronic devices through graphical icons and audio indicators.

GUI in OS/2:-

The graphic system has a layer named Presentation manager that manages windows, fonts and icons. This is similar in functionality to a non-networked version of windows GDI. On top of this lies the workspace shell (WPS) introduced in OS/2 2.0. WPS is an object-oriented shell allowing the user to perform traditional computing tasks such as accessing files, printers, launching legacy programs, and advanced object oriented tasks during using built-in and third party application objects that extends the shell in an integrated fashion not available on any other mainstream OS. WPS follows IBM's common user Access user interface standards.

WPS represents objects such as disks, folders, files, program objects, printers using the system object model, which allows code to be shared among applications, possibly written in different languages. A distributed version called OSOM allowed objects on different computers to communicate. OSOM is based on CORBA. The object

Oriented aspect of SOM is similar to, and a direct competitor to, Microsoft's component of object model, though it is implemented in a radically different manner, for instance, one of the most notable differences between SOM and COM is SOM's support for inheritance. COM does not have such support. SOM and OSOM are no longer being developed.

The multimedia capabilities of OS/2 are available through media control Interface commands. The last update added support for MPEG files. Support for new formats such as PNG, Progressive JPEG, MP3 comes from third parties. Sometimes it is integrated with the multimedia system, but in other cases it comes as standalone applications.

OS/2 Warp 4.0 was released in 1996, its new features include new graphical icons and widgets. The interface includes OpenGL, OpenDoc, and a full server development kit, which includes server virtual machine. OS/2 is a 32-bit interface with multitasking and multithreading.

Command line Interface:

CLI is a tool that processes the commands to a computer program in the form of line of text. operating systems usually implement a command line interface in a shell for interactive access to operating system functions or services.

The command line utilities in OS/2 comprises of suite of native pure 32-bit OS/2 commands that provide many useful abilities to the OS/2 user. they are called 'command line' utilities because they are all driven by the command line making them useful in command scripts.

The utilities contain no 16-bit code whatsoever, and use no 16-bit OS/2 system. They are designed to always use the native paradigms of 32-bit OS/2, whenever possible, and to operate in a way that takes best-advantages of the way that 32 bits OS/2 works and 32-bit OS/2 features.

All the utilities that deal with dates are fully capable of handling dates beyond the year 2000, beyond the year 2038. which is drop dead date for much 32 bit c and c++ code. the ability in touch and xdir commands has revealed two year 2100 bugs in OS/2 own FAT and HPFS file system, drivers.

No more arbitrary 16-bit limits :- All the utilities are limited only by available virtual memory.

For example, the commands were not upset by large directories. The `dir` examples command in IBM's `cmd`, the default command interpreter supplied with IBM OS/2, refuses to sort a directory listing containing more than 2073 files.

The `dump`, `find`, `grep`, `sort`, etc. commands can be used as filter commands, for use in a command pipeline acting upon what they receive from their standard input and producing results on their standard outputs. All the utilities can display the date & time in the format appropriate to the current settings given for `COUNTRY` in `CONFIG.SYS`. They also use OS/2's system message file to display errors and so will display error messages in local language.

Some commands in CLI:-

- (i) `cmd.exe` :- This is default command line interface for the OS/2. This when executed gives the version of the `cmd` as output.
- (ii) `dir` :- This command is used for computer files and directory listing.
- (iii) `ifconfig` :- This command displays active interface details.