

DOS 6.0 for Personal Computers

MS DOS from Microsoft Corporation, USA has been the most widely used operating system for personal computers all over the world. In 1993, the company came out with the latest version DOS 6.0 which is now also available in Indian market.

The earlier 5.0 version of DOS had the ability to run in the high memory area of RAM, making programs to run faster and more efficiently. It had an improved graphical interface—MS DOS shell which could manage programs and switch between them. It had two new commands—unformat and undelete—for data security; and online help for all MS DOS commands, MS DOS shell, and for MS DOS Editor which allowed users to easily create and modify text files. The version had the capability to create larger disk partitions upto 2 GB and support 2.88 MB floppy diskettes.

The MS DOS 6.0 has some much wanted requirements like data compression and memory management. These features are robust, automatic and fault tolerant.

The package comes with a number of additional tools which include a disk defragger, a serial/parallel file transfer tool, an antivirus tool, and client-only NetBIOS LAN software, as well as enhanced backup and undelete tools for installation on MS DOS, Windows or both.

DoubleSpace Utility: Like other compression utilities, MS DOS 6.0 has DoubleSpace Utility. This virtually increases the disk space by 1.8 times. Thus it can make available a lot of precious memory

space on the same hard disk used with earlier versions. Similarly the floppy drives too could now store more data.

The DoubleSpace utility is automatic. It creates a compressed volume file (CVF) that contains an alternative file system to store compressed files. DoubleSpace compresses each file using Lempel-Ziv-Welch technique and stores it in the CVF using space reclaimed from uncompressed disk. This conversion process is continuously checked by the utility making it fault-tolerant. This CVF shows up as drive C and therefore DIR and CHKDSK command show the virtual space estimated on average compression ratio. The utility can not compress files which are already compressed such as ZIP files. MS DOS 6.0 has enhanced disk cache for better compression system.

Disk Defraggers : DOS 6.0 provides two disk defraggers, one based on Norton's speed disk for traditional disk reorganisation. The other is internal to DoubleSpace and compacts the CVF. The first defragger invokes the second. MEMMAKER provides much needed automation for users of EMM386.EXE or the LOAD HIGH and DEVICE HIGH commands. It prepends SIZER command to every device driver and program named in CONFIG.SYS and AUTOEXEC.BAT and reboots the machine.

Antivirus Tool : It includes a monitor that watches for any suspicious disk or memory access and MS DOS and Windows version of scanner to check and remove known viruses. The scanners also record file

checksums to detect changes in EXE and COM files. It gives some false alarms too.

Undelete Tool : In MS DOS 6.0 users can undelete directories with subdirectories but it works with only one level at a time.

Backup Tool : The tool allows the user to define archive sets and store them on floppy disks or network drives using the *same communication technique* as DoubleSpace. But there is no support for tape drives for backup.

MS DOS 6.0 supports limited networking and E-mail through a separate workgroup connection module. This networking lacks server capability and protected mode protocol support of Windows for Workgroups. The file transfer system has client and sever components. *INTERSVR* runs full screen on a host, waiting for clients to connect to its local drives or printers. It runs on the client and establishes connection without buying a separate module, user has to reboot the system after including *INTERLNK* by way of *CONFIG.SYS* and other utilities.

DOS 6.0 can skip *CONFIG.SYS* & *AUTOEXEC.BAT* file, if F5 key is pressed while the system is booting up. It even has

an option of selecting each line of *CONFIG.SYS* for execution for better convenience, by using F8 key.

For organising the boot-up process, a user can create multiple paths through *CONFIG.SYS* using *MENUITEM*. Similarly an user can branch in *AUTOEXEC.BAT* and *CONFIG.SYS* files *but this sometimes has problem with MEMMAKER, therefore with MEMMAKER*, one still has to maintain multiple *CONFIG.SYS* file.

Unlike the fixed EMS and XMS with earlier version, DOS 6.0 enables EMS and XMS pools to adjust dynamically as per users' requirements. The version has two additional *DELTREE* and *MOVE* commands similar to that of UNIX. User can delete *entire trees of directories and subdirectories and can also delete individual files marked hidden, system, or read-only*. *MOVE* transplants files from one directory to another, rename a directory *CHOICE* prompts for a single character of input and returns on *ERROR LEVEL*.

The features included in the version are very useful to and much wanted by the users.