

# EDOS

Enhanced DOS for Windows

## A brief list of features:

- Change/display pif settings.
- EDOS commands will execute in batch files.
- Display extensive status information about current and other DOS sessions.
- DOS commands that corrupt disks are disabled.
- View the clipboard.

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### Glossary of Terms

System Time Real time that windows system is running.

VM Time Time that a DOS Session(VM) has been allowed to execute. Not same as system time.

VM A virtual machine. One DOS session = one VM.

Virtual Machine One DOS session runs in one Virtual Machine(VM)>

System.ini switches  
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# DOSMEM

This command is the most technically sophisticated, and potentially environment sensitive of all EDOS commands. It has been tested with DOS 3.3, 4.01, 5.0, 6.0, also Windows 3.0a and 3.1.

Batch Files  
Custom DOS Prompt

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Firefly Software Systems Corp.  
P.O. Box 5035  
Oregon City, OR 97045

Orders Only Phone: 800-248-0809  
or 503-694-2282

Tech Support Phone: 503-694-2221  
BBS 503-694-2220 (N81) up to 19.2k  
Compuserve 71171,47  
>INTERNET: 71171.47@COMPUSERVE.COM



# Installation Instructions

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#### Instructions for Trouble-shooting

If Windows hangs at startup, the first thing to do is to disable EDOS. Use the DISABLE button in the Edos Control Panel. You can also disable just EDOSLIB.DLL from loading. To disable it, place a semi-colon at the beginning of the line "EDOS=EDOSLIB.DLL", that is located in the system.ini file in the [drivers] section. If Windows will still not load, the next step is to disable EDOS.386. If disabling EDOS.386 works, then you can try disabling the system.ini switches. Setup installs some of these switches for you in the [edos] section. Prompt, PrtScr, AltF4 - to False or 0 (zero).  
If INTEL Inboard PC. Set the EDOSInbrdPC system.ini switch to True.

Instructions for Reinstallation or DeInstallation.

# Instructions for finishing installation

Fix the system.ini file as described below.

If you used the SETUP program included on the EDOS distribution disk then the installation should have been done for you automatically. In case you did not use it or the installation did not complete successfully, the following information is provided.

In order for EDOS installation to be complete, You must insert: `device=Edos.386` in the system initialization file. Click on the "EDOS.386" hot spot, to see the instructions.

In **Windows 3.1** add EDOS to the `drivers=`, line in the [boot] section of system.ini file. Also, add: `EDOS=EDOSLIB.DLL` in the [drivers] section. For example:

```
[boot]
drivers=mmsystem.dll EDOS
; there can be ONLY ONE "drivers=" line in the boot section.
[drivers]
EDOS=EDOSLIB.DLL
```

Note: there can be only ONE `drivers=` line in the [boot] section. Multiple drivers go on the same line separated by spaces. In the [drivers] section each driver has it's own separate line. Don't become confused.

Print the topic out if you need a reminder on how to do it.

It is necessary for EDOS to be installed in a subdirectory located in your Windows subdirectory. This is necessary because of the way in which the automatic installation program works and due to the fact that several files in the EDOS system must be on the path. Eventually it is intended that EDOS can be installed anywhere and be independent of the Windows subdirectory.

NOTE: System.ini contains a reference to EBIOS. This is not EDOS. It is not necessary to make any changes to the EBIOS entry.

[Instructions for modifying system.ini](#)  
[Fix winhelp and pif files](#)

Winhelp for EDOS needs a couple of hand fixes. The properties should be fixed to provide a legal path to the .HLP file. The EDOS help files are located in the EDOS subdirectory.  
Ex. WINHELP.EXE YOURDRIVE:\WINDOWSDIR\EDOS\EDOS.HLP

# Installation Instructions

Put the EDOS floppy disk in the A or B disk drives.

Click on the system menu. Click on the Run item.

Insert at the "RUN" prompt... A or B:\SETUP

This will cause the SETUP program on the floppy disk to begin executing. It will copy all your files to the correct places and do all the tasks necessary to install EDOS. If the installation does not complete successfully you will have to insert a special line in the system.ini file; which you must do by hand. You must insert: device=Edos.386 in the system initialization file. Click on the "EDOS.386" hot spot in the line just preceding here, to see the instructions. Print the topic out if you need a reminder on how to do it.

NOTE: System.ini contains a reference to EBIOS. This is not EDOS. It is not necessary to make any changes to the EBIOS entry.

[Instructions for modifying system.ini](#)

EDOS.386 is a special WINDOWS Virtual Device Driver. Not a DOS device driver that would go in the CONFIG.SYS file.

To install "EDOS.386", a line must be added to the SYSTEM.INI file located in the Windows directory. This line must be placed in the "[386Enh]" section. A plain ascii text editor will do, like edit in DOS 5.0.

Note: if this was an automatic install using SETUP.EXE, then the line may already be partly installed. The line that setup inserts reads "EDOSxx=[DRIVE:\WINDOWS]\EDOS\EDOS.386".

Change the "EDOSxx" to "device". The DRIVE:\WINDOWS stands for the drive and subdirectory where you have Windows installed. If setup completed successfully this fix should already have been done for you.

The line should look like this:

**[386Enh]**  
**device=[DRIVE:\WINDOWS]\EDOS\edos.386**

In Windows 3.1 there must also be lines placed in [boot] section and [drivers] sections of system.ini.

```
[boot]
drivers=mmsystem.dll EDOS
```

```
[drivers]
EDOS=EDOSLIB.DLL
```

Note: mmsystem.dll is not required, but is shown for example. Multiple drivers are placed on the same line in the drivers= line in the [boot] section.

# Installation Instructions

Run drive:EDOSxxxx.EXE (on a hard disk) to a floppy disk. In other words, from the floppy run the EDOSxxxx.exe program, so that it unpacks to a floppy disk.

Now go to the instructions on how to install from a floppy disk. [Install Floppy Disk Distribution](#)

[Instructions for modifying system.ini](#)



# Introduction to EDOS

Enhanced DOS for Windows(EDOS) is a unique command line processor for DOS sessions, running in Windows 386 Enhanced Mode. Command line enhancers have been around for several years. Some of them completely replace command.com, such as 4DOS(recommended). EDOS is built using completely new technology. It is similar to 4DOS in that it catches commands typed at the keyboard and converts the command into a set of functions that provide some custom feature, like a dir command that sorts entries by alpha or maybe date.

What really sets EDOS apart is that it is a VxD. VxD's do not take up space in conventional memory. VxD's are what 386 enhanced mode windows is built from. This implies that EDOS is in fact a part of the Windows operating system. A VxD has access to the entire base of Windows code, as well as the hardware machine itself. There is almost nothing that a VxD can not do. By building EDOS as a VxD instead of a real mode TSR, EDOS can have commands that in effect can manipulate any aspect of Windows that can be dreamed of.

EDOS has access to any location in memory, to any data structure, to the Windows scheduler, task manager, display control, initialization system, and the list goes on and on. This is not inherently dangerous, but it is powerful. Users can be provided features that allow precise control of the environment. This power is provided by way of a set of commands, the enhanced commands of EDOS, in such a way that the operating system is protected.

EDOS also provides enhancements to a Windowed DOS session. A fully functional menu bar with many useful features is included. In addition, you can run Windows applications from the DOS command line.

## Tested With

DOS 3.30, 4.01, 5.00, 6.00

Windows 3.0a, 3.1

EDOSPrtScr defaults to true. Which means that The hot key "PrtSc" is reserved to your DOS application; and that print screen will work as normal in that DOS, output will go to the printer, not the clipboard.

You may set this to false in system.ini. In which case "Prtsc" will send screen output to the clipboard. This is the Windows default.

When getting a status, some of the memory values will seem strange. For instance, the size of the DOS mem is larger than the amount of memory that DOS 5.0's mem command reports.

The reason for this is that EDOS is reporting the amount of memory in PAGES (4k) that Windows is using. Status converts the page count into a byte count by multiplication.

Example:

Status reports DOS mem=684k DOS 5.0 mem reports conventional memory as - 512k

The difference is the wrapper that Windows provides, and includes the display memory buffer and other data areas that are "instanced". "Instance" means that Windows makes a local copy in each DOS session of that data. Data which gets instanced includes: the low vector table, the display buffer, etc.

The XLATE buffer segment address is the location that DOS uses to store read/write buffers until Windows can copy them into extended memory.

### Making sense of conflicting numbers

You may assume that the numbers shown by EDOS are in fact accurate. They have been checked for bugs(in EDOS). However there are bugs in Windows and I have no control over those. Any bugs reported will be dealt with, where possible.

## **VDD Pif Bits**

The VDD pif bits will receive a better report in a later release.

# Acknowledgements

To the authors of "Windows 3 Secrets", Brian Livingston and Undocumented DOS, Andrew Shulman, et al: EDOS might never have been, were it not for the inspiration I received from these two books. Brian's book has been combed from cover to cover, for months. It is the book I fall asleep reading. There may not be any end to the goldmine that lies within it. Every day I wonder how I can find any more insights; and then I find another.

The list of EDOS features is rich, due in no small part to Windows 3 Secrets.

Undocumented DOS is almost as bad. Andrew's book may be nearly deaf and blind about Windows, but a flash of insight while reading the chapter on memory management led to the feature that allows EDOS to change the amount of DOS session memory, on the fly.

Undocumented DOS has been followed by Undocumented Windows by, you guessed it, Andrew Shullman. And as usual, EDOS has several new feature directly traceable to the book.

# Viruses

EDOS.386 is written in assembly language, in 386 protected mode and runs at ring 0. There are no known viruses which can infect a file of this type. That does not mean that one will not arise. However, EDOS is much harder to infect than an ordinary, COM or EXE file.



## DOS Commands Disabled

APPEND

CHKDSK /F

JOIN

SUBST

FDISK

ASSIGN

FORMAT (use File Manager)

FASTOPEN

RECOVER

DOSX

Note: This list of DOS commands disabled, contains external commands only. You should be aware that it is still possible to execute these external programs using syntax similar to: C:\chkdsk /f

If you are concerned about this possibility, then you should obtain our shareware program system named WINSAFE.

## DOS Commands User Disabled

To disable a DOS command (or program) from running, insert the following line in SYSTEM.INI, in the [edos.disable] section. EDOSCommand=xxxxxxx

for example:

```
[edos.disable]
```

```
EDOSCommand=FORMAT
```

```
EDOSCommand=COMPRESS
```

```
EDOSCommand=COPY
```

These 3 commands would disable FORMAT, COMPRESS and COPY.

Each line will disable one DOS program or command. Up to 20 such EDOSCommand(s) may be used.

## EDOS, a DOS extender for Windows Enhanced Mode

EDOS is a powerful device driver program that extends the DOS environment to make DOS, Windows aware whenever DOS is being run from inside Windows. Its primary features include new command line commands and the ability to disable DOS commands. New commands provide technical information about the state of the DOS box and the state of Windows. Also, the ability to change PIF settings originally changeable only with the PIF editor. Other features include a hot key for exiting from a DOS Box, ability to view the clipboard and an alarm that returns you to the DOS Box where the alarm was originally created. Commands to start and stop high resolution timers for performance timing are also included.

EDOS is a VxD, a special class of Windows Device Driver. VxD's form the very foundation of Windows Enhanced Mode. The core VxD code resides in the WIN386.EXE file. This file consists of many smaller pieces of code copied together to form an integrated set of VxDs(the default system in 386 mode). Each VxD component can be replaced in it's entirety, or one internal function at a time. This replaceability and substitutability provides tremendous flexibility. Windows standard/286 mode is not built this way and lacks the flexibility, inherent therein. 286 mode is difficult to modify, add to or replace. As a consequence, it is likely to receive little future development work, inside or outside Microsoft.

EDOS uses so-called "undocumented DOS" function calls, hooking of protected mode/real mode interrupt vectors and service functions provided by other VxDs. EDOS employs VxD services for managing memory, scheduling, individual device and system control, keyboard, calling DOS & BIOS services, timing, initialization information and message displaying. In short, at least one or more functions from every major group of VxD support routines.

A VxD runs at ring 0, the most privileged mode of the microprocessor. Because of this EDOS has access to the most basic parts of the Windows core. In tandem with a Windows Dynamic Link Library, a VxD like EDOS can be built to do almost anything, although at the present time no custom DLL is provided with EDOS. Even though the present version 2.00a is reasonably impressive, it is very crude compared to what could be done with more time and effort. VxD's offer great opportunities to enhance and extend Windows and it's components.

## 2 Features

EDOS features are provided by 5 groups of commands.

Control, Performance Timing, Information, Scheduling, Miscellaneous.

Control	Performance Timing	Information	Scheduling	Misc.
ALT-F4 BOXSWITCH	BOXTIME SYSTIME	STATUS/EDOS EMS XMS PIF MEM VER	PRIB PRIF BACKGROUND EXCLUSIVE SLICE	ALARM CLIPBOARD ETITLE

### Overview of Feature Groups

EDOS functions & commands can be combined in a multitude of ways to enhance the way in which you use a DOS session in Windows. Several features are built in and simply make life

easier. The ALF-F4 exit feature is one of these. Once you become accustomed to it, you'll never want to be without it. The other most noticeable feature is the pif file name and edos version number displayed at DOS session start-up. This combined with the ability to define a batch file to be run at every DOS session start-up means that you have almost unlimited flexibility to customise DOS sessions in general and any session specifically.

A few suggestions. If you use a "CLS" first, the screen will be cleared to a prompt. You can then issue whatever commands you want to create the entry screen of your choice. By "TYPE" ing a file to the screen, that says "Windows DOS Session", you will have a highly visible indicator that Windows is running. In short, you can execute any internal or external command or program that you want.

Outside of setting up the screen, the most likely thing you will want to do is add memory or change the scheduling system. Since you can set the scheduling options from a batch file it is no longer necessary to have a multitude of PIF files for every situation.

You can cause a Windows application to run from the DOS command line in a DOS session running under Windows if you have enabled it. To enable this feature see the system.ini switches.

The two control commands in EDOS are essentially hot key functions. ALT-F4 pushes "exit" + enter into the keyboard buffer which causes DOS to exit back to Windows. BOXSWITCH controls the ability to switch out of a DOS Box and back into Windows.

The two performance timers The information services are the most detailed and complex of EDOS's functionality.

4 EDOS code consists of 4 major components.

Initialization: EDOS device initialization, hooking vectors and services, installing hot keys.

Processing hooked interrupts, service calls and hot keys.

Parsing and analyzing command lines.

Servicing a supported command.

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# System.ini switches

Use the EControl Panel to make changes to these switches.

With default condition

[edos]

Alt-F4

EDOSALTF4= True

Disables EDOS loading

EDOSDisable=0

Disable a command

EDOSCommand=<blank>

Print Screen

EDOSPrtScr= True

Intel Inboard PC

EDOSInbrdPC= False

Run Windows Apps.

EDOSExecWinApp= False

Enables over 640k

EDOS640KPlus= TRUE

Enables over 704k

EDOS704KPlus= TRUE

Hooks FataIs

EDOSHookFatalOK= TRUE

Fault Messages

EDOSFaultFlag= TRUE

Alarms allowed

EDOSNumMsgs=1 (Don't increase, call tech support).

Disables Ctrl+P

EDOSCtrlP= FALSE

Note: that these switches MUST be in the [edos] section.

Use: True or False. 1 or 0. TRUE or FALSE.

## Batch Files

These new DOS commands will execute in a batch file just like any ordinary command.

Extensive use of this feature will allow you to eliminate many pif files.



Alt-F4 will cause the DOS sessions to exit, as if "exit" plus enter had been entered at the keyboard.

## Custom DOS Prompt

The DOS prompt system in EDOS has been changed. In order to conform to the method used by Win 3.1, EDOS was modified at the last minute, before release.

1. The EDOSPrompt system.ini switch has been dropped.
2. EDOS users may now have the DOS prompt set to THEIR way, in Windows 3.1.

The method is as follows:

Use the DOS "SET" command to create an environment variable "WINPMT". Like this:

**SET WINPMT=\$p\$l**

This will result in a prompt that looks like: C:\WINDOWS< when you are in Windows in a DOS session.

The SET command should be installed in autoexec.bat, do not install it in WINSTART.BAT!

YOU may use any legal prompt string when setting WINPMT. The DOS prompt will use your WINPMT string when Windows is running in a DOS session and will return to the original PROMPT when Windows exits back to plain DOS.

This trick will work in Win 3.1 with or without EDOS.

It is necessary to have both a PROMPT string and a WINPMT string for this to work.

Note: this is NOT the most elegant way to fix this very annoying problem. It will not work for everyone, however, it is the simplest fix and it WORKS!

## DOS Commands Modified

VER (puts Windows Version + DOS Version).

VER /w puts up EDOS version number.

TIME (displays time, no altering. Use Control Panel).

DATE (same as time).

CHKDSK ( /F not allowed, all other options ok).

MEM puts up Window related memory information.

WIN causes the DOS session to switch to the Windows Desktop.





Entering a command at the DOS prompt which refers to an executable file which is a Windows application will cause that application to be executed as if it were a Windows application.

This feature can be disabled with the appropriate system.ini switch as well with the /Y and /N switches using the EDOS or STATUS commands at the DOS command line.

Example:

```
EDOS /Y  
CLOCK
```

The above will execute the clock Windows application.

```
or:  
EDOS /N  
CLOCK
```

The above will execute the stub at the beginning of the Windows application (CLOCK). The stub usually prints "this application requires Microsoft Windows".

AltF4 [ON | OFF]  
STATUS [/? | /v | /l | /Y | /N]  
EDOS [/? | /v | /l | /Y | /N]  
EDOSEXIT [/?]  
PIF [/?]  
EMS [/?]  
ETITLE [?] ["New Title"]  
XMS [/?]  
MEM [/?]  
PRIB [/? | milliseconds]  
PRIF [/? | milliseconds]  
SLICE [/? | milliseconds]  
DOSMEM [/? | k bytes | /P | /X | /V]  
ALARM [/? ] | [seconds ["message string"]]  
BOXSWITCH [/? | ON | OFF]  
BACKGROUND [/? | ON | OFF]  
EXCLUSIVE [/? | ON | OFF]

CLIPBOARD [/? | /VIEW]  
SYSTIME [/?]  
BOXTIME [/?]  
ISWIN [/?]

Execution of Windows applications from the DOS command line.

Menu Bar (in Windowed DOS session)

The new DOS commands accept a "/" option which provides the usual help information.

**Alt-F4**

ALTF4 [/?   ON   OFF]
-----------------------

The hot key combination Alt-F4 will cause a DOS session to exit just as if "EXIT" + enter had been typed at the keyboard.

This feature can be disabled in this version. See system.ini switches. Can also be enabled/disabled using the optional parameter ON or OFF.



## **CLIPBOARD**

```
CLIPBOARD [/? | /VIEW]
```

The clipboard command displays the clipboard status or the contents of the clipboard.

The clipboard status is printed if the command is typed. The clipboard text is viewed if the V option is used.

Redirection allows the clipboard to be printed.

Ex: `clipboard /VIEW > PRN:`

## **ALARM**

```
ALARM [/?] | [ seconds ["message string"]]
```

The alarm command allows you to set an alarm that will "ring" at the time indicated by the (delay in seconds) parameter. An optional message string may be included; it must be enclosed by double quote marks.

```
ALARM 5 "Time to Eat"
```

Will cause an alarm message to be displayed in 5 seconds. You will be returned to the DOS session where the alarm was set. The message string "Time to Eat" will be displayed in the message box.

NOTE: only one alarm is allowed per DOS session.

## **BACKGROUND**

```
BACKGROUND [/? | ON | OFF]
```

The background command causes the DOS session to have the background mode changed. The background mode status is printed whenever the mode is changed or the command is typed.

The one allowed parameter turns the setting ON or OFF.

Ex. Background OFF

## **BOXSWITCH**

```
BOXSWITCH [/? | ON | OFF]
```

The boxswitch command enables/disables switching away from the DOS session. The boxswitch mode status is printed whenever the mode is changed or the command is typed.

The one allowed parameter turns the setting ON or OFF.

Ex. Boxswitch OFF

## BOXTIME

```
BOXTIME [/?]
```

First invocation starts a DOS Box-time timer. Second invocation prints the elapsed DOS session cpu time.

Time is measure in milliseconds.

Ex. Boxtime

## **DOSMEM**

DOSMEM [/?   K bytes   /P   /X   /V]
--------------------------------------

DOSMEM allows you to add memory to the current DOS session.

Ex: DOSMEM 200

Adds 200K bytes of memory to the DOS session.

DOSMEM, with no parameter, displays the DOS session size, the space not occupied by memory and the amount of memory left in the memory pool.

Example:

DOSMEM<enter>

Present DOS memory size= 362 K bytes, 100 K bytes can be added, From= 172K

This means that the DOS session is presently 362k, that 100k can be added and that there is 172k from which to get the memory.

DOSMEM /P

Adds memory to the DOS Session to make a 704 K partition

DOSMEM /X

Adds memory to the DOS session to make a 736 K partition

DOSMEM /V

Displays technical information about the DOS session memory layout.

**WARNING:** the /P & /X options create partitions that use address space where the VIDEO buffers normally reside. Therefore: a DOS session modified by /P or /X will not correctly run a DOS application which uses graphics or 43/50 line text display modes.

**NOTE:** it is not advisable to use all the remaining memory. If 172K is left, don't use more than 100-120k. Leave at least 50k.

Presently, can only be invoked one time in each DOS session.

**NOTE:** Use of more than 640k, means that you CAN NOT run any application in that session that uses graphics mode. You will receive no warning about this, but if the application runs or shifts into graphics mode, your screen will be trashed and so will the session. The only cure will be to kill the session and start over.

If you are running QEMM, you should EXCLUDE=B000-B7FF, on the command line that loads QEMM.

386Max and other similar memory managers should have the similar option set.

**Note:** some SCSI drives are using memory space at 639k. DPT and Future Domain controllers, as well as some of the Western Digital units. EDOS will correctly detect this in most cases. If the space at 639k is in use, you will not be able to have an oversized DOS session. DPT and Future Domain have special device drivers that will relocate this memory usage into upper memory. Once this is done, you will be able to use oversized DOS sessions.

## **EMS**

EMS [/?]

Displays the Expanded Memory minimum and maximum settings for the DOS session. EMS settings cannot be changed once the session has started.

EMS Required= 0K EMS Limit=300K

EMS Free= 200K, Total= 290K , Page Frame Segment = E000 hex.

## **EXCLUSIVE**

```
EXCLUSIVE [/? | ON | OFF]
```

The exclusive command causes the DOS session to have the exclusive mode changed. The exclusive mode status is printed whenever the mode is changed or the command is typed.

The one allowed parameter turns the setting ON or OFF.

Ex. Exclusive OFF

Note: the instant that exclusive ON is enabled, ALL other DOS sessions AND all WINDOWS applications cease to run, until the session that enabled exclusive on, is switched into the background.



## ***EDOSEXIT***

EDOSEXIT returns the exit code of the last internal EDOS command executed

This exit code may be tested in a batch file, like this:

```
DOSMEM /P
```

```
EDOSEXIT
```

```
IF ERRORLEVEL 1 ECHO EDOS DOSMEM Command Failed
```

## ***ISWIN***

ISWIN returns an exit code of 3 to indicate that windows 3.xx is running. Otherwise it returns zero.

This exit code may be tested in a batch file, like this:

```
ISWIN
```

```
IF ERRORLEVEL 3 goto Windows3
```

## **MEM**

MEM [/?]

Displays the Windows low level memory information.

Example:

Total Mem= 7804K, Free Mem=5896K (unlocked), Unlocked Mem=1252K

Physical Mem=2052K, Free Phys Mem=144K

NOTE: the most interesting number here is the Free Physical Mem. Which in the example was only 144K. When free physical reaches zero, all new memory is coming from the disk swap file. This has a significant impact on system performance.

**PRIB**

PRIB [/?   milliseconds]
--------------------------

The background priority command(PRIB) allows you to change or display the BACKGROUND Execution Priority of the DOS session.

Ex. Prib 27

## **PRIF**

PRIF [/? | milliseconds]

The foreground priority command(PRIF) allows you to change or display the FOREGROUND Execution Priority of the DOS session.

## **PIF**

PIF [/?]

Displays the pif settings for the DOS Box. Sample:

Command = COMMAND.COM

Command Tail = /E:2000 /C any.bat

C:\WIN\\_DEFAULT.PIF

Text Emulate

No Trap Text

No Trap Low Res Graphics

Trap High Res Graphics

Video Text Mode

EMS Required= 0K, Limit=1024K

XMS Required= 0K, Limit=1024K

VDD Bits = 0017 , VM Status 00004000

## **SLICE**

```
SLICE [/? | milliseconds]
```

The slice command allows you to change or display the Minimum Time Slice allocated to ALL sessions. All Windows applications share one session, each DOS session is a session, etc. Setting slice changes the time for everybody.

## **SYSTIME**

```
SYSTIME [/?]
```

First invocation starts a system-time timer. Second invocation prints the elapsed system time.

Time is measured in milliseconds.



## **XMS**

XMS [/?]

Displays the Extended Memory required & limit settings for the DOS session. The XMS settings cannot be changed once the session has started.

XMS Required= 0K XMS Limit=1024K

## **STATUS & EDOS**

```
[STATUS | EDOS] [/? | /V | /L]
```

The /V option displays all (verbose) information.

The /L option lists all the sessions: current, other, Windows (system).

The /Y option turns on Execution of Windows applications.

The /N option turns off Execution of Windows applications.

### ***The /V command displays a screen similar to the following:***

#### **Enhanced DOS for Windows Version 3.0**

Free Memory: No Lock or Fix= 516K, Lockable= 516K

Swap File Size= K, Type= None

Total Paging Mem = 0K, Free = 0K In Use Total= 0 Kc, Contig=?

Windows Physical Memory Total= 2200K, Free= 544K

Physical UnLocked(in use)= 0Kc, Unlocked= 544K

Real Physical Memory Base= 640K, Extended= 3456K, Total = 4096K

EMS Free = 0K, EMS Total= 0K, Page Frame Address= E000 hex

PageOutCount = 1

Xlate Buffer Segment = 2800hex, Size 8192 bytes

Stack Unused = 3606hex, Stack Used 1364, Stack Total = 4970hex

Ebios Page = 9F00hex, Size 1000 hex, Remain = 0000 hex, Start = 0000hex

Com Ports ComPort1=ID#1

Global Min. Time Slice = 21 ms.

### ***The /V and /L commands display a screen similar to the following:***

#### **Current DOS Session**

Background =N, Exclusive =N

Foreground Priority = 100, Background Priority = 50, CPU Time = 66%

Memory Used = 164K, Not Mapped = 0K (1K=1024 Bytes)

#### **Windows Session(System)**

Background=Y, Exclusive=Y

Foreground Priority= 101, Background Priority= 51, CPU Time= 33%

Memory Used= 960K, Not Mapped = 0K (1K=1024 Bytes)

Free Memory: No Lock..      Memory (free) not lockable or fixable

Lockable

Free memory (lockable)

Swap File Size  
Type

Size of Swap file in K bytes  
None, DOS/BIOS, Direct to hard disk.

Total Paging Memory  
In use total  
Contig

Memory available to the demand pager  
A calculation of Total minus Free = in use.  
Y=Yes, N=No.

Windows Physical Mem

Total real memory available to Windows

EMS Free,Total

EMS memory, free and total available



PageOutCount

Number of pages on page out list

Xlate Buffer Segment

Segment & size of translation buffer

Stack Space

Size of Stack

Ebios Page

Segment & size of Extended Bios Data Area

Com Ports

Com Port Assignments

Global Min. Time Slice

Minimum time slice in milliseconds

Background

Y=Background enabled. N=disabled

Exclusive

Y=Exclusive enabled. N=disabled



Memory Used

Memory dedicated to this session.

Not Mapped

Memory dedicated to session but not mapped in.

For/Back Priority

From PIF file, priority when in fore/background

Windowed DOS session have a menu bar.

This menu consists of:

File

Edit

View

Settings

EDOS Help

Indicators Background & Exclusive... {b} and [X]



## Menu Items for SETTINGS:

Current	Allows changing of Background and Exclusive states. also contains menu item to KILL the current task and others.
Fast Paste	Turn on/off the PIF option for fast pasting.
WinAppExec DOS command line.	Turn on/off option for allowing Windows applications to run from the DOS command line.
Drag/Drop	Turn on/off DOS session accepting a Drop Object. Currently File Manager provides Drop Objects and DOS sessions and PIF Editor will accept them. Other utilites may also work with Drag/Drop.
Startup	Loads PIF editor with PIF for the current DOS session.

Menu Items under VIEW:

SCROLL arrow keys.	Turns on/off Scroll mode. ESC & Enter will exit from this mode. Use arrow keys.
FULL- SCREEN	Switches from Windowed to FULL SCREEN.
FONTS	Dialog Box selection list of FONTS.
50 Lines	Switches into 50 line mode.
25 Lines	Switches into 25 line mode.
SCREENSAVE	Switches on the screen saver.
FONTS	Dialog box of available fonts.

Menu items under EDIT:

MARK	Start mark mode, to create a selection region.
COPY	Copy the selection region to the clipboard.
PASTE	Paste the contents of the clipboard into the DOS session at the cursor.
VIEW	Startup the Clipboard Viewer.
CLIP STATUS	Display size and contents of clipboard.
PRINT CLIP	Print the contents of the clipboard to the printer.



Menu Items for {b} and [X]

The {b} is the indicator for Background on/off. When the indicator is grayed, Background is OFF.

The [X] is the indicator for Exclusive on/off. When the indicator is grayed, Exclusive is OFF.

Menu Items for EDOS Help:

INDEX

KEYBOARD

COMMANDS

SEARCH FOR HELP ON...

HELP ON HELP

Menu items under File:

- NEW            Select a file to run as a NEW session.
- PICK           Select a file name to be placed at the cursor.
- EXIT           Exit and close the DOS session.

CPU Time

Percent of CPU time assigned to this DOS session

