EDOS

Enhanced DOS for Windows

A brief list of features:

•• Dos Sessions Group on desktop.

• Change/display pif settings.

List of Information Topics

Summary of New Dos Commands Dos Commands Modified Keyboard Commands Menu Bar Summary Of Original DOS Commands Quick Tips

Summary of DOS Commands

Append Attrib Backup Break Call CLS Commanc COMP	Set Data Path Change/Set file attributes
Copy CD Date	Copy files Change Directory Display the current date
Debug Del Dir Diskcomp	Delete files
Diskcopy Edlin Exit Fdisk Find Format Help Join	Duturalum a labat an a diale
Label MD Time Path Print Prompt	Put volume label on a disk Make a directory Display the current time
RD Recover Restore Sort Subst SYS Type VOL Xcopy	Remove Directory
Ver Verify	Display the DOS Version number Set/Reset the Verify Flag

Batch Files Custom DOS Prompt

System.ini switches

With default condition:

[edos.disable] Disable a command

EDOSCommand=<blank>

[edos] Alt-F4 Disable EDOS loading Print Screen Intel InboardPC

 $EDOSALTF4 = \underline{True}$ EDOSDisable = 0 $EDOSPrtScr = \underline{True}$ $EDOSInbrdPC = \underline{False}$

Enable/Dis Over 640k Enable/Dis Over 740k Edos handles Int 24h Debug Messages EDOS640KPlus=TRUE EDOS704KPlus=TRUE EDOSCritError=FALSE EDOSInidb=FALSE

Handle exceptions faultsEDOSFaultFlag=FALSEFatal exits, use our message EDOSHOOKFatalOk=TRUENumber of alarms allowedEDOSNumMsgs=1 (more than one may cause stack overflows)Windows Apps runEDOSExecWinApp=FALSEShare message at startupEDOSWarnShare=TRUECtrl+P, printintEDOSCtrlP=FALSE

Examples:

[edos] EDOSHookFatalOK=True EDOSHOOKFATALOK=False edoshookfatalok=1 EdosHookFatalOk=0

These are all legal uses of "EDOSHookFatalOK".

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

Batch Files

The new EDOS 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.

Custom DOS Prompt

Windows v. 3.1 includes a mostly undocumented feature where you can have a custom DOS prompt in the DOS sessions that run under Windows. To have a custom prompt, use a DOS "SET" command to create an environment variable "WINPMT". Like this:

SET WINPMT=\$T\$P\$L

When Windows is running a DOS session the DOS the WINPMT prompt above will cause the DOS prompt to have the time,drive/directory and a "<".

Keyboard Commands		
Alt+Enter	Toggles from full-screen to windowed and back.	
Alt+Tab	Shifts to last task.	
Alt+Tab+Tab	Shifts tasks.	
Alt+Space	Switches to windowed mode, if full screen, with system menu open.	
Ctrl+ESC	Runs the task switcher program.	
Crtl+Shift+ any curs	or key Selects text in a Windowed DOS session, if mark is ON.	

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	Switches the DOS session to the Windows Desktop

Entering a command at the DOS prompt which referes 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] <u>STATUS [/? | /v | /l | /Y | /N]</u> EDOS [/? | /v | /i |/Y | /N] EDOSEXIT [/?] PIF [/?] EMS [/?] ETITLE [?] ["New Title"] XMS [/?] MEM [/?] PRIB [/? | milliseconds] PRIF [/? | milliseconds] SLICE [/? | milliseconds] SWTO [/?] ["title string"] DOSMEM [/? | k bytes | /P | /X | /V] ALARM [/?] | [seconds ["message string"]] BOXSWITCH [/? | ON | OFF] BACKGROUND [/? | ON | OFF] EXCLUSIVE [/? | ON | OFF]

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

<u>Execution of Windows</u> applications from the DOS command line. <u>Menu Bar</u> (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.

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This feature can be disabled in this version. See <u>system.ini</u> 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.

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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.

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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.

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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 occuppied 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 recieve 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 oversize 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.

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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.

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PRIB

PRIB [/? | milliseconds]

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

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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.

I

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 a session, etc. Setting slice changes the time for everybody.

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

 $\frac{\text{Background}}{\text{Foreground Priority}} = \text{N}, \\ \frac{\text{Foreground Priority}}{\text{Foreground Priority}} = 100, \\ \frac{\text{Background Priority}}{\text{Memory Used}} = 164\text{K}, \\ \frac{\text{Not Mapped}}{\text{Not Mapped}} = 0\text{K} (1\text{K}=1024 \text{ Bytes})$

Windows Session(System)

Background=Y, Exclusive=Y Foreground Priority= 101, Background Priority= 51, CPU Time= 33% Memory Used= 960K, <u>Not Mapped</u> = 0K (1K=1024 Bytes) Free Memory: No Lock.. Memory (free) not lockable or fixable

Lockable

Free memory (lockable)

Swap File Size

Туре

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

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

Windows Physical Mem Total real memory available to Windows

EMS Free, Total

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

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:

<u>File</u>

<u>Edit</u>

<u>View</u>

<u>Settings</u>

EDOS Help

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

Menu Items for SETTINGS:

CurrentAllows changing of Background and Exclusive states.
also contains menu item to KILL the current task and others.Fast PasteTurn on/off the PIF option for fast pasting.WinAppExec
DOS command line.Turn on/off option for allowing Windows applications to run from the
currently File Manager provides 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
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

ETITLE

ETITLE [/?] | ["title string"]

The etitle command allows you to set a title; it must be enclosed by double quote marks. ETITLE "Custom Title"

The title string "Custom Title" will be displayed in the DOS session's caption.

SwitchToTask

SWTO

SWTO [/?] ["target DOS session name"]

The swto command switches to another the DOS session.

Ex. Swto "Your Title"

Causes the present DOS session to be switched to another presently running DOS session with the title of "Your Title" $\ensuremath{\mathsf{T}}$

Note: Upper and lower case are not significant, when swto is looking for a target session.