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The File menu includes commands that enable you to change the preferences for Elana and to exit the program.

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About elana

System.ini Menu

The system.ini menu includes all the commands that you use to access the dialogue boxes to adjust the Windows system settings.

For more information; select the appropriate menu command name

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Glossary

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Exiting

To exit Elana use the exit command from the <u>file menu</u>.

File, Exit Command

Use this command to exit Elana.   You can also exit Elana by using the Windows standard hot key sequence of ALT-F4.

File, preferences Command

Use this command to alter the preferences that elana uses.

System.ini file name

You can alter the name of the <u>system.ini</u> file so that you may experiment with the settings for Windows.   Elana will search in the Windows directory for this file.   Do not put a path specification on the system.ini file name.   Elana will create or edit the file in the windows directory.

Create back-ups

If you enable the create back-ups files check box then:-

> Elana will create a file with the same name and a extension of .bak whenever Elana adjusts one of the system settings.   Elana will back-ups the win.com, win.ini and the system.ini file.

Delete default ini file entries

If you enable the delete default ini file entries then:-

> Each ini file entry that matches the default value that entry will be deleted from the ini file.

Enable warnings

Some of the things Elana can do to your system.ini file may make Windows unstable (read stuffed), so Elana will warn you before you try to do this.   If you don't like to be warned then uncheck this option.

NOTE: Elana will warn you even if the changes may not make Windows unstable.

Storage of preferences

Elana preferences will be stored in the win.ini file under the [Elana] heading.   The following table lists the names and uses of the preferences.

```
system.ini    :name of the system.ini file, default is system.ini.
deldefault    :1 or 0, 1 to delete default ini file settings, 0 to write all settings.
backups       :1 or 0, 1 will backup all changed files, 0 no backups
warnings      :1 or 0, 1 will enable warnings, 0 no warnings.
```

To use: Select this command from the menu.

File, system setup Command

Use this command to run the system setup program

File, control panel Command

Use this command to run the control panel program

File, registration Command

Use this command to print a registration form.

Windows, change logo command

Use this command to change the logo that Windows displays when it startups.

How to change the startup logo.

1.   By using the list of files and directory choose the RLE format file that you wish to use as the startup logo.

2.   Double click on the selected file name or press the OK button.

3.   The startup logo will now be changed bearing in mind any errors that may occur.

4.   Start Windows again to view your new startup logo.

To use: Select this command from the menu or double click on the Logo icon.

NOTE

You must use a RLE file that has been created specifically for your graphics adapter.

Windows, change startup programs command

Use this command to change the programs that Windows <u>loads</u> or <u>runs</u> when it startups.

How to change the startup programs.

1.   Select the appropriate program list.

2.   Press the + button to add a program to the list.

3.   Press the - button to remove the selected program from the list.

4.   Press the OK button to save the changes.

The programs on the run= and load= line can be separated by a comma (,), tab (\t) or space.

To use: Select this command from the menu or double click on the Start icon.

Windows, edit win.ini command.

Use this command to execute notepad.exe with win.ini as the file to edit.

To use: Select this command from the menu or double click on the WinIni icon.

Windows, Flush win.ini cache.

This command is used to flush the win.ini file cache.

Notes:

Windows will store win.ini settings in an internal cache to speed up the reading and setting of these options.   Often when you change an option in the win.ini file some applications seem to take no notice of these changes.   This is because the settings have been stored in the cache and Windows has not reread the win.ini file.   By using this command the win.ini cache will be flushed and Windows will read from the win.ini file next time it is asked to read an option.

This command will also send a message to all applications telling them that the win.ini file has changed and to please reread your stored win.ini file options.

To use: Select this command from the menu.

Windows, associations.

Use this command to edit the file extension <u>associations</u> stored in win.ini.

To edit an existing association:

1. Select the association from the list of associations.

2. Edit the association extension or program using the edit windows. Choose a new program to associate with the extension by clicking on the find program button.

3. Click on the update association button to save your changes.

To delete an existing association:

1. Select the association from the list of associations.

2. Click on the delete association button.

To create a new association:

1. Type in the new association information into the edit windows. Choose a new program to associate with the extension by clicking on the find program button.

2. Click on the new association button.

To save the changes to the association information click on the OK button

To use: Select this command from the menu.

System.ini Standard Command.

Use this command to alter the system file settings that are used in Standard mode.

Dialogue settings

To use: Select this command from the menu or double click on the Standard icon.

System.ini NonWindows Command

Use this command to alter the system file settings that are used when non Windows programs are running.

Dialogue settings

To use: Select this command from the menu or double click on the NonWin icon.

System.ini 386 Enhanced command

Use this command to alter the system file settings that are used when Windows is running in 386 <u>Enhanced mode</u>.

When selecting this command you will be presented with a submenu that shows all the commands that can be selected when adjusting 386 enhanced mode settings.

For more information select the appropriate following menu command.

<u>Communications</u>
<u>Memory</u>
<u>EMS memory</u>
<u>Networks</u>
<u>Keyboard</u>
<u>Disk</u>
<u>Other</u>

386 Enhanced, Communications command

Use this menu command to adjust communications settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Comms icon.

386 Enhanced, memory command

Use this menu command to adjust the memory settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Mem icon.

386 Enhanced, EMS memory command

Use this menu command to adjust the EMS memory settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the EMS icon.

386 Enhanced, Networks command

Use this menu command to adjust the networks settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Net icon.

386 Enhanced, Keyboard command

Use this menu command to adjust the networks settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Key icon.

386 Enhanced, Disk command

Use this menu command to adjust the disk settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Disk icon.

386 Enhanced, Other command

Use this menu command to adjust all the other settings that Windows uses in 386 enhanced mode.

Dialogue box settings

To use: Select this command from the menu or double click on the Other icon.

Communications dialogue box settings.

Boost time

Com1 base address   Com1 buffer
Com2 base address   Com2 buffer
Com3 base address   Com3 buffer
Com3 base address   Com4 buffer

Com1 IRQ   com1 Protocol
Com2 IRQ   com2 Protocol
Com3 IRQ   com3 Protocol
Com4 IRQ   com4 Protocol

IRQ Sharing
Grab LPT ports

Communication port problems

Press [←┘Enter] to save your changed settings to your system.inisy file.

Press [Esc]   to abandon your changes.

Press ALT-D or click on the [Default] button to change all settings to their default values.

Press ALT-H or click on the [Help] button to receive this help information.

Communications, Boost time

COMBoostTime=<milliseconds>

Default: 2

Purpose: Specifies the amount of time (in milliseconds) to allow a virtual machine to process a COM interrupt. If a communications application is losing keyboard characters on the display, you can try increasing this value.

Communications, Com base address

COM1Base=<port>
COM2Base=<port>
COM3Base=<port>
COM4Base=<port>

Default: COM1Base=3F8h; COM2Base=2F8h; COM3Base=2E8h; COM4Base=2E0h

Purpose: Specifies the base (first) port for the serial port adapter you are using. Check your hardware documentation for the appropriate value.

Communication port problems

Communications, Com port problems

For those having problems with Com3 and Com4:

Summary:

The following table depicts the standard settings for the four communications ports that Windows 3.0 and DOS (4.01)support. This information will be useful for trouble shooting Communications problems under Windows 3.0. A brief description for each column appears below the table.

```
      | (WIN3 COMM.DRV)|  WIN3  DEFAULT  |  WIN3 DESIRED
      |   PROCOM PLUS  | SYS.INI SETTINGS | SYS.INI SETTINGS
Port | I/O range  IRQ |I/O range    IRQ |I/O range     IRQ
-+-- |----------------|-----------------|------------------
      |                |     [386ENH]   |     [386ENH]
COM1 |    3F8h      4 | COM1BASE=3F8h  4 | COM1BASE=3F8h   4
COM2 |    2F8h      3 | COM2BASE=2F8h  3 | COM2BASE=2F8h   3
COM3 |    3E8h      4 | COM3BASE=2E8h  4 | COM3BASE=3E8h   4
COM4 |    2E8h      3 | COM4BASE=2E0h  3 | COM4BASE=2E8h   3
```

The first column lists the ports. The second column describes the settings for the ports that both the WindowsCOMM.DRV and most popular communications packages use by default. The third column shows what Windows 3.0 sets by default and the fourth column shows what should be set in the [386ENH] section of the SYS.INI file for proper functioning of the ports under Enhanced Mode Win3.

More Information:

The headings I/O range specify the Base Port Addresses for the respective ports. IRQ represents the normal interrupts used in IBM-AT compatible computers and should not be changed under normal conditions. Under Windows 3.0 EnhancedMode you can change the Base Port addresses, IRQ lines, ComProtocol and COM IRQ sharing.

Troubleshooting Communications Problems under Win3:

1. You can use two Com ports simultaneously that share the same interrupt (e.g. COM1 & COM3, or COM2 & COM4) in most cases if the hardware is capable of it. The ability to shareCOM Port IRQs is very hardware dependent. Presently, the only hardware that you can be assured that IRQ sharing is supported on is MicroChannel. Although EISA(Extended Industry Standard Architecture) does have IRQ sharing as part of its specifications - implementation on current machines is spotty. If you are unable to successfully share an IRQ with the IRQ Sharing switch set to true, the hardware does not support IRQ sharing and Windows 3.0 is not able to overcome the lack of support for this feature using software.

2. Com3 and Com4 may not be reliable under Win3 (Standard and Real) Unless BOTH Com1 AND Com2 are first activated.So if you use only Com3 and/or Com4 you may experience problems (printing, communications, mouse). If you use Com1and Com3 without using Com2 you may have problems. The easiest way to remember this is to not use a higher serialport (2,3 or 4) unless all lower number ports (1,2 and 3)are first activated (or in use).

3. Standard and Real Mode Win3 use the COMM.DRV directly whereas Enhanced Mode Win3 Virtualizes the ports using a device called the "Virtual Com Driver" or VCD. For this reason serial communication can theoretically be considered more reliable under Standard and Real mode because there can be no miscommunication between the VCD and the COMM.DRV. In

cases where you are using multiple Com ports under Win3Enhanced Mode, verify that the Base Port Addresses are set as described in the table located earlier in this section.

Communications, Com buffer

COM1Buffer=<characters>
COM2Buffer=<characters>
COM3Buffer=<characters>
COM4Buffer=<characters>

Default: 128

Purpose: Specifies the number of characters that will be buffered by the device on the corresponding communications port. Before changing one of these settings, make sure the corresponding COMxProtocol setting has the proper value. Buffering may slow down communications on a port, but might be necessary to prevent some communications applications from losing characters at high baud rates. The size of the buffer required will depend on the speed of the machine and the application's needs. Before increasing this value, see the COMxProtocol setting.

Communications, Com IRQ

COM1Irq=<number>
COM2Irq=<number>
COM3Irq=<number>
COM4Irq=<number>

Default: COM1Irq=4; COM2Irq=3; COM3Irq=4; COM4Irq=3

Purpose: Specifies which interrupt line is being used by the device on the specified communications port. Check your hardware documentation for the appropriate value. Setting a value to -1 disables input for that COM port. You would do this only if there is a hardware conflict between ports.

Communication port problems

Communications, XON Protocol

Check box checked equals the XOFF entry.

COM1Protocol=<XOFF-or-blank>
COM2Protocol=<XOFF-or-blank>
COM3Protocol=<XOFF-or-blank>
COM4Protocol=<XOFF-or-blank>

Default: (Default is no entry, which is the same as any entry other than XOFF)

Purpose: Specifies whether Windows in 386 enhanced mode should stop simulating characters into a virtual machine after the virtual machine sends an XOFF character. Set the value for a port to XOFF if a communications application using that port is losing characters while doing text transfers at high baud rates. Windows will resume simulating characters when the virtual machine sends another character after the XOFF character. Leave this setting disabled if the application is doing binary data transfers; enabling this switch might suspend binary transmissions. Windows will not check for XOFF characters if this setting is blank or set to anything other than XOFF. If the application continues to lose characters after this setting is properly set, try increasing the corresponding COMxBuffer value.

Communications, IRQ sharing

Check box checked equals true.

COMIrqSharing=<Boolean>

Default: true for Micro Channel (TM) and EISA machines; false for all other machines

Purpose: Specifies whether COM IRQs will be sharable between multiple communications ports or with other devices. Enable this switch if your machine uses the same interrupt for COM3 or COM4 as it does for COM1 or COM2.

The default for Elana is false in all cases.

Communications Grab LPT ports

SGrabLPT=<port-number>

Default: none

Purpose: Routes all printer interrupts on the specified port to the system virtual machine rather than to the current virtual machine.

Enter a number from 1 to 3 to specify the routing printer port number.

Memory dialogue box settings.

Map Physical Address
KB required
Memory size
Max Paging Size
Paging
Paging Drive
Permanent VM Files
PSP Increment
System Virtual Memory Virtual 86 Locked
XMS Limit
XMS Locked
XMS Required
DMA Buffer in 1 MB
DMA Buffer size

Press [←Enter] to save your changed settings to your system.inisy file.

Press [Esc]   to abandon your changes.

Press ALT-D or click on the [Default] button to change all settings to their default values.

Press ALT-H or click on the [Help] button to receive this help information.

Memory, Map Physical Address

MapPhysAddress=<range>

Default: none

Purpose: Specifies the address range (in megabytes) in which the memory manager will preallocate physical page-table entries and linear address space. Use this setting if you are using a DOS device driver (such as an older version of RAMDrive that uses extended memory) that needs this contiguous memory.

Memory, KB required

WindowKBRequired=<kilobytes>

Default: 256

Purpose: Specifies how much conventional memory (in kilobytes) must be free in order to start Windows.

Memory, Memory size

WindowMemSize=<number-or-kilobytes>

Default: -1

Purpose: Limits the amount of conventional memory Windows can use for itself. The default value (-1) indicates that Windows can use as much of this space as it needs. You can try entering a positive value less than 640 if there is not enough memory to run Windows in 386 enhanced mode.

Memory, Max Paging Size

MaxPagingFileSize=<kilobytes>

Default: none

Purpose: Specifies the maximum size (in kilobytes) for a temporary swap file.

Memory, paging

Check box checked equals yes.

Paging=<Boolean>

Default: yes

Purpose: Enables or disables demand paging (virtual memory). You would disable this setting only if you need the disk space normally used for a temporary swap file.

Memory, paging drive

PagingDrive=<drive-letter>

Default: none

Purpose: Specifies the disk drive where Windows in 386 enhanced mode will allocate a temporary swap file. This setting is ignored if you have a permanent swap file. If you don't have a permanent swap file and no drive is specified or the specified drive does not exist, Windows will attempt to put your temporary swap file on the drive containing your SYSTEM.INI file. If the specified drive is full, paging will be disabled.

Memory, Permanent VM Files

PerVMFILES=<number>

Default: 10

Purpose: Specifies the number of private file handles Windows should allocate to each virtual machine. Increase this value if an application does not have enough file handles to run. The total number of file handles, including the global handles specified in the FILES= statement in CONFIG.SYS, cannot exceed 255. If it does exceed 255, this value will be rounded down. Set this value to 0 to prevent the allocation of any private file handles.

Memory, PSP Increment

PSPIncrement=<number>

Default: 2

Purpose: Specifies the amount of additional memory, in 16-byte increments, that Windows should reserve in each successive virtual machine when the UniqueDOSPSP setting is enabled. The setting that will work best for your machine might vary depending on your memory configuration and the applications you are running. Valid values are 2 through 64. See UniqueDosPSP for more information.

Memory, System Virtual Memory Virtual 86 Locked

Check box checked equals true.

SysVMV86Locked=<Boolean>

Default: false

Purpose: If enabled, causes the virtual-mode memory being used in the system virtual machine to remain locked in memory rather that being swappable out to disk. Because Windows handles this process, there is no known reason to enable this setting.

Memory, XMS Limit

SysVMXMSLimit=<kilobytes>

Default: 2048

Purpose: Specifies the maximum amount of memory (in kilobytes) the extended memory driver will allocate to DOS device drivers and memory- resident software in the system virtual machine. Set the value to -1 to give an application all the available extended memory that it requests.

Memory, XMS Locked

Check box checked equals yes.

SysVMXMSLocked=<Boolean>

Default: no

Purpose: Indicates whether to swap the memory allocated by the extended memory driver to the hard disk. Locking the XMS memory (enabling this setting) can improve an application's performance, but it slows down the rest of the system.

Memory, XMS Required

SysVMXMSRequired=<kilobytes>

Default: 0

Purpose: Specifies how many kilobytes of extended memory must be reserved by the XMS driver in order to start Windows. Leave this setting at zero if there are no XMS users in the system virtual   machine.

Memory, DMA Buffer in 1 MB range

Check box checked equals yes.

DMABufferIn1MB=<Boolean>

Default: no

Purpose: Indicates, if enabled, that the direct memory access (DMA) buffer memory should be in the first 1MB of memory (above 640K, if possible) in order to be compatible with 8-bit bus master cards.

Memory, DMA Buffer size

DMABufferSize=<kilobytes>

Default: 16

Purpose: Specifies the amount of memory (in kilobytes) to be reserved for buffered direct memory access (DMA). This memory will be allocated above 640K, if possible. Windows in 386 enhanced mode will default to a DMA buffer size that will handle disk access.

EMS memory dialogue box settings.

Dialogue box settings.

No EMM driver
Reserve page frame
System Virtual EMS limit
System Virtual EMS locked
System Virtual EMS required
EMM size
Ignore installed EMS driver
EMM Include
EMM Exclude
EMM Page Frame

Press [←┘Enter] to save your changed settings to your system.inisy file.

Press [Esc] to abandon your changes.

Press ALT-D or click on the [Default] button to change all settings to their default values.

Press ALT-H or click on the [Help] button to receive this help information.

EMS memory, No EMM driver

Check box checked equals true.

NoEMMDriver=<Boolean>

Default: false

Purpose: If enabled, prevents Windows in 386 enhanced mode from installing its expanded memory driver. This differs from setting <u>EMMSize</u> to zero, which does not prevent the EMM driver from being loaded.

EMS memory, Reserve page frame

Check box checked equals true.

ReservePageFrame=<Boolean>

Default: true

Purpose: Tells Windows whether to give preference to EMS page frame space or conventional memory when it has to use one of the two to allocate DOS transfer buffers. This choice is necessary when Windows can not find space between 640K and 1MB other than EMS page frame space. If enabled, this setting will preserve EMS page frame space at the expense of conventional memory. If you are not going to run non-Windows applications that use expanded memory, you can disable this setting to give non-Windows applications more conventional memory.

EMS memory, System Virtual EMS limit

SysVMEMSLimit=<kilobytes>

Default: 2048

Purpose: Specifies how many kilobytes of expanded memory Windows should be permitted to use. Setting this value to 0 prevents Windows from gaining access to any expanded memory. Setting it to -1 gives Windows all the available expanded memory that it requests.

EMS memory, System Virtual EMS locked

Check box checked equals yes.

SysVMEMSLocked=<Boolean>

Default: no

Purpose: Indicates whether to swap Windows' expanded memory to the hard disk. Locking expanded memory can improve the performance of a Windows application that uses it, but locking it slows down the rest of the system.

EMS memory, System Virtual EMS required

SysVMEMSRequired=<kilobytes>

Default: 0

Purpose: Specifies how many kilobytes of expanded memory must be free in order to start Windows. Leave this setting at zero if no Windows application requires expanded memory.

EMS memory, EMM size

EMMSize=<kilobytes>

Default: 65,536

Purpose: Specifies the total amount of memory to be made available for mapping as expanded memory. The default allocates the maximum possible amount of system memory as expanded memory. You should specify a value for this setting if you run an application that allocates all of the available expanded memory. This will be apparent if, when you run the application, you can never create any new virtual machine. If this value is zero, then no expanded memory will be allocated, but the EMM driver will be loaded. This setting does not prevent the EMM driver from being loaded; use the <u>NoEMMDriver</u> to disable EMM.

EMS memory, Ignore installed EMS driver

Check box checked equals yes.

IgnoreInstalledEMM=<Boolean>

Default: no

Purpose: If enabled, this setting allows Windows to start in 386 enhanced mode even when there is an unknown expanded memory manager (EMM) running. This can cause the system to fail if memory- resident software was using EMM before Windows started. Enable this setting only if no such software is installed or you are sure it will not be active when you are running Windows. This setting applies only to expanded memory managers servicing physical EMS hardware; Windows will not disable unrecognized 80386 expanded memory emulators.

EMS, EMM Include

EMMInclude=<paragraph-range>

Default: none

Purpose: Specifies a range of memory that Windows will scan for unused address space regardless of what may be there. EMMInclude takes precedence over <u>EMMExclude</u> if you specify ranges that overlap. The range (two values separated by a hyphen) must be between A000 and EFFF. The starting value is rounded down and the ending value is rounded up to a multiple of 16K.   For example, you could set EMMInclude=C800-CFFF to ensure that Windows scans the addresses C800:0000 through CFFF:000F. You may specify more than one range by including more than one EMMInclude line.

Elana can not specify or edit more than one EMMInclude line.   If you need more than one EMMInclude line then use an editor to change your system.ini file.

EMS, EMM Exclude

EMMExclude=<paragraph-range>

Default: none

Purpose: Specifies a range of memory that Windows will not scan to find unused address space. This has the side effect of turning off the RAM and ROM search code for the range. The range (two paragraph values separated by a hyphen) must be between A000 and EFFF. This scanning can interfere with some adapters that use the same memory area. The starting value is rounded down and the ending value is rounded up to a multiple of 16K. For example, you could set EMMExclude=C800-CFFF to prevent Windows from scanning the addresses C800:0000 through CFFF:000F. You can specify more than one range by including more than one EMMExclude line.

Elana can not specify or edit more than one EMMExclude line. If you need more than one EMMExclude line then use an editor to change your system.ini file.

EMS, EMM Page Frame

EMMPageFrame=<paragraph>

Default: none

Purpose: Specifies the starting paragraph where the 64K page frame will begin when Windows in 386 enhanced mode cannot find a suitable page frame. Allows an EMM page frame in an area containing some unused RAM or ROM. For example, you could set EMMPageFrame=C400 to start the page frame at C400:0000.

Networks dialogue box settings.

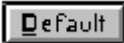Dialogue settings

DMA size
Fall back
Heap size
Timeout
Token ring search
Unique DOS PSP

Press ⟵Enter to save your changed settings to your system.inisy file.

Press Esc to abandon your changes.

Press ALT-D or click on the Default button to change all settings to their default values.

Press ALT-H or click on the Help button to receive this help information.

Network, DMA size

NetDMASize=<kilobytes>

Default: 32 on Micro Channel (TM) machines 0 on non-Micro Channel machines

Purpose: Specifies the DMA buffer size (in kilobytes) for NetBIOS transport software if a network has been installed. In this case, the buffer size is the larger value between this value and the value of DMABufferSize.

Network, Fall back

Check box checked equals true.

NetAsynchFallback=<Boolean>

Default: false

Purpose: If enabled, tells Windows to attempt to save a failing NetBIOS request. When an application issues an asynchronous NetBIOS request, Windows will attempt to allocate space in its global network buffer to receive the data. If there is insufficient space in the global buffer, Windows will normally fail the NetBIOS request. If this setting is enabled, Windows will attempt to save such a request by allocating a buffer in local memory and preventing any other virtual machines from running until the data is received and the timeout period (specified by the <u>NetAsynchTimeout</u> setting) expires.

Network, Heap size

NetHeapSize=<kilobytes>

Default: 12

Purpose: Specifies the size (in kilobytes) of the buffers that Windows in 386 enhanced mode allocates in conventional memory for transferring data over a network. All values are rounded up to the nearest 4K.

Network, Timeout

NetAsynchTimeout=<seconds>

Default: 5.0

Purpose: Specifies the timeout period (in seconds) when Windows needs to enter a critical section in order to service an asynchronous NetBIOS request. It is used only when NetAsynchFallback is enabled. This value can include a decimal (such as 0.5).

Network, Token ring search

Check box checked equals yes.

TokenRingSearch=<Boolean>

Default: true

Purpose: Tells Windows whether to search for a token ring network adapter on machines with IBM PC/AT (R) architecture. Disable this setting if you are not using a token ring card and the search interferes with another device.

Network, Unique DOS PSP

Check box checked equals 1.

UniqueDOSPSP=<Boolean>

Default: false (see below for exception)

Purpose: If enabled, tells Windows to start every application at a unique address (PSP). Each time Windows creates a new virtual machine to start a new application, Windows reserves a unique amount of memory (i bytes) below the application. For example, the first application would be loaded at address M, the second at address M+i, the third at M+2i, and so forth. The amount of memory is determined by the PSPIncrement setting (earlier in this section). These settings should help assure that applications in different virtual machines all start at different addresses. Some networks use applications' load addresses to identify the different processes using the network. On such networks, failing to enable this setting might cause one application to fail when you exit another, because the network interprets them as the same. However, enabling this setting will leave slightly less memory for non-Windows applications. If you are running a network based on Microsoft Network or LAN Manager, the default value is true.

Keyboard dialogue box settings.

ALT key delay
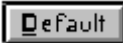ALT paste delay
Boost time
Buffer delay
Idle delay
Paste delay
Paste time out
Translate scan codes

Press ⬅Enter to save your changed settings to your system.inisy file.

Press Esc to abandon your changes.

Press ALT-D or click on the Default button to change all settings to their default values.

Press ALT-H or click on the Help button to receive this help information.

Keyboard, ALT key delay

AltKeyDelay=<seconds>

Default: .005

Purpose: Specifies how much time Windows waits to process a keyboard interrupt after it processes an ALT interrupt.   Some applications expect a slower processing rate than Windows in 386 enhanced mode normally uses. Increase this value if such an application has trouble handling the ALT key.

Keyboard, ALT paste delay

AltPasteDelay=<seconds>

Default: .025

Purpose: Specifies how much time Windows waits before pasting any characters after the ALT key has been pasted. Some applications may require more time for recognition of the ALT keystroke.

Keyboard, Boost time

KeyBoostTime=<seconds>

Default: .001

Purpose: Specifies the amount of time (in seconds) an application gets to run with increased priority when it receives a keystroke. You can use this setting to increase the response to keystrokes when several background applications are running.

Keyboard, Buffer delay

KeyBufferDelay=<seconds>

Default: 0.2

Purpose: Specifies the amount of time (in seconds) to delay pasting keyboard input after the keyboard buffer is full. Some applications might require more than 0.2 seconds.

Keyboard, Idle delay

KeyIdleDelay=<seconds>

Default: 0.5

Purpose: Specifies how much time Windows ignores idle calls after simulating a keystroke into a virtual machine. You can set this value to 0 to speed up keyboard input, but some applications might respond sluggishly if you do.

Keyboard, Paste delay

KeyPasteDelay=<seconds>

Default: 0.003

Purpose: Specifies how much time (in seconds) to wait before pasting any characters after a key has been pasted. Some applications might require more time than 0.003 seconds for recognition of a keystroke.

Keyboard, Paste time out

KeyPasteTimeout=<seconds>

Default: 1

Purpose: Specifies how much time (in seconds) to allow an application to make the necessary BIOS calls for reading keyboard input before Windows will change from the fast paste (INT16h) to the slow paste (INT9h) mechanism.

Keyboard, Translate scan codes

Check box checked equals yes.

TranslateScans=<Boolean>

Default: no

Purpose: Indicates whether Windows will translate a keyboard's scan codes to make them compatible with standard IBM scan codes. This setting is necessary only for keyboards that generate non- standard scan codes. This setting is used only for the Switcher Screen and message boxes.

Disk dialogue box settings.

Notify file manager of file changes
High floppy disk drive reads
IRQ 9 Global
Minimum disk free
Virtual hard disk IRQ

Press [←Enter] to save your changed settings to your system.inisy file.

Press [Esc]   to abandon your changes.

Press ALT-D or click on the [Default] button to change all settings to their default values.

Press ALT-H or click on the [Help] button to receive this help information.

Disk, Notify file manager of file changes

Check box checked equals on.

FileSysChange=<Boolean>

Default: on (But in a standard SYSTEM.INI file, Setup will set FileSysChange=off, disabling this setting.)

Purpose: Indicates whether File Manager will automatically receive messages any time a non-Windows application creates, renames, or deletes a file. When this setting is disabled, a virtual machine can be run exclusively even when it manipulates files. Enabling this setting can slow down system performance significantly.

Disk, High floppy disk drive reads

Check box checked equals yes.

HighFloppyReads=<Boolean>

Default: yes

Purpose: Normally, Windows turns a DMA verify to the area E000:0000-EFFF:000F into a read in order to work around problems with certain machines. In rare cases, this might cause the system to fail because some software might, as a result, write over the system's shadow RAM if you have it in this area. If this happens, disable this setting and set EMMExclude to E000-EFFF.

Disk, IRQ 9 Global

Check box checked equals yes.

IRQ9Global=<Boolean>

Default: no

Purpose: If enabled, converts IRQ9 masks to global. Enable this setting if your system hangs when your system touches a floppy drive. Or make sure your system touches the floppy drive before starting Windows.

Disk, Minimum disk free

MinUserDiskSpace=<kilobytes>

Default: 500

Purpose: Tells Windows how much disk space (in kilobytes) to leave free when creating a temporary swap file. You would want to use this setting if your system's paging drive has less available space than Windows can use for paging. This setting has no effect if a permanent swap file exists.

Disk, Virtual hard disk IRQ

Check box checked equals yes.

VirtualHDIrq=<Boolean>

Default: on

Purpose: Allows Windows in 386 enhanced mode to terminate interrupts from the hard disk controller, by-passing the ROM routine that handles these interrupts. Some hard drives might require that this setting be disabled in order for interrupts to be processed correctly. If this setting is disabled, the ROM routine handles the interrupts, which slows the system's performance.

Other dialogue box settings.

Mouse soft int
NMI reboot
Reflect INT 2A
System ROM break
Timer Critical
Update time
Use Inst file
VCPI warning
CGA no snow control
Dual display
In DOS polling
INT28 critical
All VMS exclusive

Press **←⏎Enter** to save your changed settings to your system.inisy file.

Press **Esc** to abandon your changes.

Press ALT-D or click on the **Default** button to change all settings to their default values.

Press ALT-H or click on the **Help** button to receive this help information.

Other, Mouse soft int

Check box checked equals true.

MouseSoftInit=<Boolean>

Default: true

Purpose: Specifies whether Windows should convert INT 33h function 0 hard initialization calls to function 33 soft initialization calls, which do not reset the mouse hardware. Leaving this switch enabled allows you to use a mouse with a non-Windows application that you start in a window. Disable this setting if you are having problems (extraneous display output or a distorted cursor) using the mouse with an application. If you disable this setting, you will not be able to use the mouse with a non-Windows application that you start in a window.

Other, NMI reboot

Check box checked equals yes.

NMIReboot=<Boolean>

Default: no

Purpose: If enabled, causes a reboot to occur when a nonmaskable interrupt is received.

Other, Reflect INT 2A

Check box checked equals true.

ReflectDosInt2A=<Boolean>

Default: false

Purpose: Indicates whether Windows should consume or reflect DOS INT 2A signals. The default means Windows will consume these signals and therefore run more efficiently. Enable this setting if you are running memory-resident software that relies on detecting INT2A messages.

Other, System ROM break

Check box checked equals true.

SystemROMBreakPoint=<Boolean>

Default: true

Purpose: Specifies whether Windows should use ROM address space between F000:0000 and 1MB for a break point. Windows in 386 enhanced mode normally searches this space to find a special instruction that is used as a system break point. If this address space contains something other than permanently available ROM, you should disable this setting.

Other, Timer Critical

TimerCriticalSection=<milliseconds>

Default: 0

Purpose: Instructs Windows to go into a critical section around all timer interrupt code, and specifies a timeout period (in milliseconds). Specifying a positive value will assure that only one virtual machine at a time will receive timer interrupts. Some networks and other global memory-resident software may fail unless this setting is used. However, using it will slow down performance and can make the system sluggish or seem to stop for short periods of time.

Other, Update time

WindowUpdateTime=<milliseconds>

Default: 50

Purpose: Specifies the amount of time (in milliseconds) Windows takes between updates of the display for a widowed non-Windows application.

Other, Use Inst file

Check box checked equals true.

UseInstFile=<Boolean>

Default: false

Purpose: Specifies whether Windows should look in the INSTANCE.386 file for information it can use to determine whether data structures within DOS need to be local. There are two other methods for giving Windows this information: internal tables within the device, and an INT 2Fh call documented in the OEM Adaptation Kit. Both methods are preferable to using this setting; it is provided only for compatibility with Windows/386 version 2.x.

Other, VCPI warning

Check box checked equals true.

VCPIWarning=<Boolean>

Default: true

Purpose: Specifies whether Windows should display a warning message when an application attempts to use the Virtual Control Program Interface (VCPI), which Windows does not support. Disable this setting if you do not want to see this message every time you run software that does a VCPI call but still runs without this support.

Other, CGA no snow control

Check box checked equals yes.

CGANoSnow=<Boolean>

Default: no

Purpose: If enabled, causes Windows to do special handling to avoid snow appearing on an IBM CGA display device.

Other, Dual display

Check box checked equals 1.

DualDisplay=<Boolean>

Default: See "Purpose."

Purpose: Normally, when running in 386 enhanced mode, the memory between B000:0000 and B7FF:000F will be used by the general system unless a secondary display is detected. If this setting is enabled, this memory will be left unused and available for display adapters. If this setting is disabled, the address range will be available on EGA systems but not under VGA systems, since the VGA display device supports monochrome modes, which use this address space.

Other, In DOS polling

Check box checked equals yes.

InDOSPolling=<Boolean>

Default: no

Purpose: If enabled, prevents Windows from running other applications when memory-resident software has the InDOS flag set. Enabling this setting is necessary if the memory-resident software needs to be in a critical section to do operations off an INT21 hook. Enabling this setting will slow down system performance slightly.

Other, INT28 critical

Check box checked equals true.

INT28Critical=<Boolean>

Default: true

Purpose: Specifies whether a critical section is needed to handle INT28h interrupts used by memory-resident software. Some network virtual devices do internal task switching on INT28h interrupts. These interrupts might hang some network software, indicating the need for an INT28h critical section. If you are not using such software, you might improve Windows' task switching by disabling this setting.

Other, All VMS exclusive

Check box checked equals true.

AllVMsExclusive=<Boolean>

Default: false

Purpose: If enabled, this setting forces all applications to run in exclusive full-screen mode, overriding all contrary settings in the applications' program information files (PIFs). Enabling this setting might prolong the length of the Windows session when you are running network and memory- resident software that is incompatible with Windows.

Standard dialogue box settings.

Use this dialogue box to alter the settings that Windows uses in <u>standard mode</u>.

<u>Interrupt 28 filter</u>
<u>Network heap size</u>
<u>Pad code segments</u>
<u>Reserved low memory</u>

Press [←┘Enter] to save your changed settings to your system.inisy file.

Press [Esc]   to abandon your changes.

Press ALT-D or click on the [Default] button to change all settings to their default values.

Press ALT-H or click on the [Help] button to receive this help information.

Standard, Interrupt 28 filter setting.

Int28Filter=<number>

Default: 10

Purpose: Specifies the percentage of INT28h interrupts, generated when the system is idle, that are made visible to software that is loaded before Windows. Windows will reflect every nth interrupt, where n is the value of this setting.   Increasing this value might improve Windows' performance, but may interfere with some memory- resident software such as a network. Set this value to 0 to prevent INT28h interrupts. But note that setting this value too low will add to system overhead that might interfere with communications applications.

Standard, Network heap size.

NetHeapSize=<kilobytes>

Default: 8

Purpose: Specifies the size (in kilobytes) of the buffer pool that standard-mode Windows allocates in conventional memory for transferring data over a network. Some networks require a larger buffer than the default. Increasing this value will diminish the amount of memory available to applications. If no network software is running, this setting will be ignored and no memory will be allocated.

Standard, Pad code segments.

Check box checked equals 1.

PadCodeSegments=<0-or-1>

Default: 0

Purpose: Setting this value to 1 causes Windows kernel to pad code segments with 16 bytes. This will prevent the last instruction in the segment from being too close to the segment limit for 80286 C2 stepping. You only need to set this value to 1 for this 80286 stepping. Unfortunately, there is no easy way of telling what stepping a 80286 chip is. Try setting this value to 1 if your 80286 system hangs in standard mode.

Standard, Reserved low memory.

ReservedLowMemory=<kilobytes>

Default: 0

Purpose: Specifies the amount of conventional memory (in kilobytes) to be reserved for use by programs other than Windows. There is no known reason to change this value.

Non Windows dialogue box settings.

Use this dialogue box to alter the settings that are used for non-Windows applications.

Network asynch
Screen lines
Swapdisk

Press ![Enter] to save your changed settings to your system.inisy file.

Press ![Esc] to abandon your changes.

Press ALT-D or click on the ![Default] button to change all settings to their default values.

Press ALT-H or click on the ![Help] button to receive this help information.

Non Windows, network asynch.

Check box checked equals 1.

NetAsynchSwitching=<0-or-1>

Default: 0

Purpose: Indicates whether Windows will allow you to switch away from an application (running in real mode or standard mode) after it has made an asynchronous network BIOS call. The default value of 0 specifies that such task switching is not allowed. Switching away from some applications that make these calls might cause your system to fail. Once Windows detects an asynchronous NetBIOS call, it will not allow switching from the application even if no more of these calls are made. Set this value to 1 if you are sure the applications you use will not receive network messages while you are switched away from them.

Non Windows, Screen lines.

ScreenLines=<number>

Default: 25

Purpose: Specifies the number of lines that will be displayed on the screen when a non-Windows application is run. An application that specifies a different screen mode can override this setting.

Non Windows, Swapdisk.

SwapDisk=<drive-colon-directory>

Default: (The directory pointed to by the TEMP environment variable; if there is no TEMP variable, then the default is the Windows directory)

Purpose: Provides the name of the disk drive and directory to which Windows running in real mode or standard mode swaps non-Windows applications.

About the Elana program.

Elana is a program written by Andrew Rowe to help you modify your **system.ini** file and other stuff that you can't readily modify with the standard system programs.

I think it is really super duper.   Please pay me lots of money if you do too!

WARNING the changes that Elana can make to your system may make Windows unusable, so I am taking this opportunity to ask you to make many back-ups whilst playing with the system.ini options.   You have been warned!

If you like this program and intend to keep on using it then I would expect you to register with me.   Registration entitles you to keep on using the program beyond the trial period. To see more information about registration click on the more... button in the About... dialog box.

System.ini

The system.ini file is the file that Windows will read on startup to configure it's self

386 Enhanced mode

386 Enhanced mode is the premier mode that Windows uses to get virtual memory, multitasking of DOS programs and swapable memory.   It requires a Intel 386 processor and 1 megabyte of extended memory.

Standard mode

Standard mode is the second mode used by Windows.   Windows runs in Standard mode much like OS/2 works.   It requires a 286 or 386 processor and 384k of extended memory. Standard mode is about 20% faster than 386 enhanced mode but does not allow multitasking of DOS programs.

RLE

RLE stands for Run Length Encoding and refers to the type of data compression that the graphics file has undergone.   To create a new RLE logo file use a paint or graphics program that supports this data format.

Load=

When Windows starts it will load all the programs in the load= line in the win.ini file as icons.

Run=

When Windows starts it will run all the programs in the run line in the win.ini file as widowed programs.

Association

Data files can be associated with a program by relating the extension of the data file with the name of the program.   Windows stores this information in the [Extensions] section of your win.ini file.   For example: data files with the extension .doc can be associated with winword.exe by the following win.ini file line:-   doc=winword.exe ^.doc