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+ -PIF Editor Basics

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+



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-What Is PIF Editor? -PIF Editor Basics

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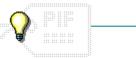
 Memory Options

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-What Is PIF Editor?

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Naming a PIF Ways to Start an Application with a PIF



What Is PIF Editor?

PIF Editor is an application for creating or changing <u>program information files</u> (PIFs). A PIF contains information about a particular <u>non-Windows application</u> that determines how that application runs with Windows.

Why a Non-Windows Application Needs a PIF

In the MS-DOS environment, an application normally runs alone. It does not have to share your system's memory and hardware with other applications (except for device drivers and memory-resident programs). In the Windows environment, you might run several applications simultaneously; those applications must share memory and system hardware. Windows manages the applications you run to ensure that system resources are being used as efficiently as possible.

To manage a non-Windows application effectively, Windows needs to know that application's basic requirements, and how the application interacts with memory and hardware. An application's PIF supplies the information that Windows needs. Some items in the PIF tell Windows how the application is designed to work--for example, how the application uses the display. Other PIF items let you control how the application runs with Windows. For example, you can limit how much memory the application receives, or specify that you want the application to run in a window (in 386 enhanced mode only).

The PIF Editor Window

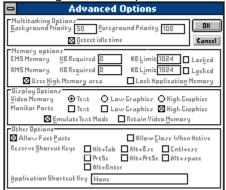
The window you see when you start PIF Editor depends on the mode Windows is running in. If Windows is running in <u>standard</u> or <u>real</u> mode, you will see the following window:

🗖 PIF Editor-(untitled) 🛛 🖬 🔺		
<u>File M</u> ode <u>H</u> elp		
Program Filename		
Window <u>T</u> itle:		
Optional Parameters:		
Start-up Directory:		
Video Mode:	Text Graphics/Multiple Text	
Memory Requirments:	KB Required 128	
XMS Memory:	KB Required 0 KB Limit 0	
Directly Modifies:	□ COM 1 □ COM 3 □ Keyboard □ COM 2 □ COM 4	
■No Screen Exchange ⊠Close Window on Exit	Prevent Program Switch	
Reverse Shortcyt Keys	Alt+Tab Alt+Esc Ctrl+Esc PrtSc Alt+PrtSc	

If Windows is running in <u>386 enhanced</u> mode, you will see the following window:

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<u>File M</u> ode <u>H</u> elp		
Program Filename		
Window <u>T</u> itle:		
Optional Parameters:		
Start-up Directory:		
Memory Requirments:	KB <u>R</u> equired 12 8	KB Desired 640
Dispaly Usage: 🖲 Ful		Background
O Wir	dowed	Exclusive
Close Window on Ex	jt <u>A</u> dvanced	-

If Windows is running in 386 enhanced mode and you choose the Advanced button, you will see the following advanced options:



If you want to know more about creating or changing PIFs for different modes, see the next topic.

PIF Modes

<u>F</u> ile	
<u>M</u> ode	
<u>S</u> tandard	
<u>3</u> 86 Enhanced	

Each PIF contains two sets of options:

• The Standard options are for running the <u>non-Windows application</u> with Windows in <u>real mode</u> or <u>standard mode</u>.

• The 386 Enhanced options are for running the non-Windows application with Windows in <u>386</u> enhanced mode.

When you start PIF Editor, it automatically displays the correct options for the mode you are running Windows in. Occasionally, you might want to specify PIF options for a mode you are not currently running Windows in. (Click + for an example.) You change modes with commands on the Mode menu.

When You Need to Create or Change a PIF

In some circumstances, you don't need to create or change a PIF for a <u>non-Windows application</u>. For example, when you install non-Windows applications, Setup might recognize some of the applications and create the PIFs for them. If the non-Windows applications run well under Windows, you can leave their PIFs the way they are.

Additionally, your application might come with its own PIF. Check the application documentation or the <u>application disks</u> themselves for a file with the .PIF <u>extension</u>.

If Setup doesn't create a PIF for a non-Windows application and the application doesn't come with its own PIF, you can sometimes use the default PIF. In this case, just start the application from Program Manager, and if the application runs adequately with the <u>standard settings</u>, you don't have to create a PIF for it.

The following describes some reasons you might want to create or change a PIF:

• A non-Windows application did not come with a PIF, and you want the application to run as well as possible. In this case, you would create a new PIF for the application from scratch.

• A non-Windows application with its own PIF does not run well with Windows. For example, you might want to give the application more memory so that it can run properly, or to enable it to run faster.

• You want to change the application's pathname. For example, if you have moved the application to a different directory, you would want to change the application's pathname.

• You want to change the start-up directory to the directory that contains the application's data files rather than, for example, the directory that contains the application.

• The way the application runs with Windows should be changed. For example, you might want to run the application in a window or give the application a shortcut key that makes the application <u>active</u> when you press the key combination.

Related Topics

Concepts

General Options Screen Display and Video Options Shortcut Keys

Procedure

Creating New PIFs from Scratch

PIF Editor standard settings

PIF settings Windows uses when you start a non-Windows application and Windows can't find a PIF for the application.

Guidelines for Creating or Changing PIFs

Here are some guidelines for creating or changing PIFs:

Change only what needs to be changed and leave the remaining options the way they are.

If you're creating a new PIF from scratch, fill in the <u>text boxes</u> that need to be filled in and change only the remaining settings that need to be changed.

• Before you begin specifying PIF Editor options, consult the documentation of the <u>non-Windows</u> <u>application</u> and, if possible, learn how the application uses memory and how it works with hardware devices, such as ports or the video display.

Modes

If the mode Windows is currently running in is the mode in which the non-Windows application will run, you don't need to change modes in PIF Editor. If the non-Windows application will run in a different mode, you should choose the mode from the Mode menu before you begin specifying options.

Context-sensitive Help

When you're ready to begin specifying options, keep in mind that PIF Editor has context-sensitive Help. When the <u>insertion point</u> or <u>selection cursor</u> is at an option and you press F1, Help appears with information specific to that option. Therefore, a good strategy is to press F1 at each area of the dialog box and read about the options before you specify them.

Related Concept

General Options

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Of the first four options, Program Filename is the only option you must specify. In the box, type the complete <u>pathname</u> for the <u>program file</u> or the .BAT file that starts the program. This pathname indicates to Windows the location of the program file of the <u>non-Windows application</u>.

The Window Title option specifies the name that will appear in the application's title bar.

Optional Parameters are the parameters you would type if you were to start the application from MS-DOS. For example, if you normally type **word/c** when you start Microsoft Word from MS-DOS, you would type **/c** in this box.

In the Start-up Directory box, you can specify a pathname if you want the application to start up in a specific directory. For example, you might want to change the start-up directory to the directory that contains the application's data files rather than the directory that contains the application.

Related Concept

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Memory Options

Memory requirement options in a PIF tell Windows how much and what kind of memory the <u>non-Windows application</u> needs. These options do not control how much memory the application might request at any given time.

Memory Requirements

The KB Required option in both Standard and 386 Enhanced modes tells Windows how much <u>conventional memory</u> the application needs before Windows starts it.

In 386 Enhanced mode, KB Desired limits the amount of conventional memory given to the application.

NOTE: The Memory Requirements options refer to the amount of free memory the application needs. When setting these options, keep in mind that requirements listed in the application's documentation might refer to the total amount of memory your system should have, not to the amount of memory that must be free in order for the application to run.

EMS Memory

The EMS Memory option specifies how much <u>expanded memory</u> the application will need. This option is available only in 386 Enhanced mode. When you're running in <u>386 enhanced mode</u>, Windows itself doesn't actually use expanded memory. However, in this mode, Windows can simulate expanded memory for non-Windows applications that need it.

The KB Required option specifies how much memory must be available at startup. KB Limit restricts the amount of memory the application can have.

XMS Memory

The XMS Memory option specifies how much <u>extended memory</u> the application will need. Windows is designed to make efficient use of extended memory. However, very few non-Windows applications use extended memory. Therefore, you can usually leave these options at their standard settings.

The KB Required option specifies how much memory must be available at startup. KB Limit restricts the amount of memory the application can have.

High Memory Area

In 386 Enhanced Mode, the Uses High Memory Area option tells Windows that the application is allowed to use the <u>high memory area</u> (HMA) of RAM.

Keep this option selected for most applications. If the HMA is available and the application uses it, more memory will be available to the application. If the application does not use the HMA, no memory is wasted.

conventional memory

The first 256K or 640K of memory on your computer.

When you start MS-DOS, it uses up some of your computer's conventional memory. Next, MS-DOS starts the utilities and applications listed in your CONFIG.SYS and AUTOEXEC.BAT files, using up more conventional memory. The memory that is left over is available for running applications (including Windows).

expanded memory

General-purpose memory that exists separately from your system's conventional and extended memory. Because expanded memory is more cumbersome to use than extended memory, Windows does not use expanded memory except when running in real mode. However, Windows does allow non-Windows applications to use expanded memory. (When running with Windows in 386 enhanced mode, applications do not use physical expanded memory. However, Windows can simulate expanded memory for non-Windows applications.)

extended memory

General-purpose memory beyond 640K on 80286, 80386 and 80486 computers. Windows requires extended memory to run in standard or 386 enhanced mode. Although few non-Windows applications use extended memory, Windows uses it to manage and run applications. (In 386 enhanced mode, Windows can even use extended memory to simulate expanded memory for non-Windows applications.)

high memory area (HMA)

The first 64K of extended memory.

If the HMA is available when Windows starts, each application can allocate its own private HMA. However, the HMA is used by some memory-resident utilities such as networks (and optionally by MS-DOS 5.0). If such a utility is using the HMA when you start Windows in 386 enhanced mode, no other application will be able to use the HMA. Few applications use the HMA, so this is rarely a problem.

Screen Display and Video Options

Certain PIF options describe how a <u>non-Windows application</u> uses the screen display. Windows uses this information to allocate video memory to the application.

In standard and real modes, the only screen display option is the video mode. If your application doesn't run in graphics mode, make sure to choose the text mode option since this mode uses less memory.

In 386 enhanced mode, you can use the Display Usage option to specify whether or not to run the application in a window. When considering this option, keep in mind that an application that runs full-screen uses less memory. Also, some applications cannot run in a window due to the way they use the screen display.

The Advanced Options dialog box contains options that determine how much video memory the application should receive. You can choose from three video modes: Text, Low Graphics, and High Graphics. The option you choose determines how much memory Windows provides for the application's screen display when you start the application.

The Emulate Text Mode option applies to applications that run with the screen display in text mode and use the standard ROM BIOS services for their output. The Retain Video option applies to applications that work in more than one video mode.

Related Topics

386 Enhanced Mode Options

Display Usage

Advanced Options for 386 Enhanced Mode

Emulate Text Mode Retain Video Memory Video Memory

Standard Mode Options

Video Mode

Multitasking Options

In 386 Enhanced mode, <u>multitasking</u> options govern how a <u>non-Windows application</u> runs when it runs in the foreground (or is the <u>active</u> application) and when it runs in the background (or is an inactive application). When choosing these options, consider how you want the application to use the computer's resources in relation to other applications.

Execution

If you select Background, the application will be able to run when it is an inactive application. For example, if you want the application to be able to calculate numbers when it is in the background, select this option.

If you select Exclusive, the application will retain exclusive use of the computer's resources. No other applications will be able to run in the background, including applications for which you selected Background. You might select Exclusive so that the application will run more smoothly or won't be interrupted by another application.

Advanced Options

If you choose the Advanced button, you will see the Multitasking Options. The Foreground Priority option determines how an active application runs in relation to the applications in the background. The Background Priority option determines how an inactive application runs in relation to other inactive applications and the active application.

The numbers in the boxes do not represent a percentage of CPU resources. Rather, they set the priority of the application relative to the other applications that are running. The larger the priority you give the application, the more CPU resources are allocated to it.

The Detect Idle Time option gives CPU resources to another application when this application is waiting for keyboard input. Generally, you should select this option because it lets the other applications run faster. However, some communications applications don't run well if Detect Idle Time is selected.

Shortcut Keys

The Reserve Shortcut Keys option lets you reserve <u>shortcut keys</u> for use by the <u>non-Windows</u> <u>application</u> instead of by Windows. This option applies only when the application is <u>active</u>. When the application is inactive, the shortcut keys have Windows functions.

In the Advanced Options dialog box, the Application Shortcut Key option lets you select a shortcut that will make an inactive application become active.

Naming a PIF

When you name a PIF with the Save As command, you must use .PIF as the <u>extension</u>. Windows only recognizes PIFs that have this extension.

If you want to use the PIF you've created when you start the <u>non-Windows application</u>, you must give the PIF a base filename that matches the program filename. For example, if the program filename is MP.COM (Multiplan), you would give the PIF the name MP.PIF. The PIF should then be kept in a Windows directory or in the same directory as the application.

If you want to start the application from File Manager by choosing the PIF or from Program Manager by choosing a <u>program item icon</u> with the PIF pathame, you do not need to give the PIF a base filename that matches the program filename . For example, you might want to create more than one PIF for the application, each with a different name, different settings, and a different program item icon. You could then start the application by choosing one of the PIFs from File Manager or by choosing one of the program item icons from Program Manager. The application would then start with the settings you specified in the PIF.

Related Topics

Concept Ways to Start an Application with a PIF

Procedures

<u>Adding Items to a Group</u> <u>Starting an Application (from File Manager)</u> <u>Starting Applications from a (Program Manager) Group</u>

Ways to Start an Application with a PIF

In Program Manager, you can start a non-Windows application from a program item icon as you would any Windows program. If Setup didn't add the icon for you, you can add the icon to Program Manager yourself. If the base filename of the PIF matches the program filename, Windows will use the PIF when it runs the application--as long as the PIF resides in a Windows directory or in the same directory as the application.

Additionally, if you specify the PIF's pathname for a program item icon, you can start the application from Program Manager by choosing the icon. For example, you might want to create more than one PIF for the application, each with a different name, different settings, and a different program item icon. You could then use any of the icons to start the application with the settings specified in the PIF.

You can also start the application from File Manager simply by choosing its PIF filename or icon in a directory window.

Related Topics

Concept

Naming a PIF

Procedures Adding Items to a Group Starting an Application (from File Manager) Starting Applications from a (Program Manager) Group

Click a menu name or command.	

<u>M</u> ode	

-PIF Editor Commands-

11

Click a menu name or command.

<u>F</u> ile	
<u>M</u> ode	
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New Command

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Creates a new <u>PIF</u> with standard settings.

When you choose this command, PIF Editor lets you saves changes to the current file. Related Procedure

Open Command



Opens an existing <u>PIF</u>.

When you choose this command, PIF Editor lets you save changes to the current file.

Save Command



Saves changes to the current <u>PIF</u>.

When you choose this command, the file remains open so you can continue working on it.

Related Procedure

Save As Command



Saves a new <u>PIF</u> or existing PIF under another name.

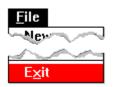
If you don't specify an extension when you name a new or rename an existing file, .PIF is automatically assigned to the filename. Although PIF Editor will allow you to save a PIF with another extension, Windows will only use files that have .PIF as the extension. If you specify an extension, it overrides any automatic extension.

You might want to use this command to rename a file so that you can change the file without modifying the original.

Related Procedures

Procedures <u>Creating New PIFs from Scratch</u> <u>Creating PIFs for Batch Files</u> <u>Editing PIFs</u> <u>Modifying the Standard PIF Settings</u>

Exit Command



Exits PIF Editor and closes the PIF Editor window. If the <u>PIF</u> is unsaved, PIF Editor lets you save it before exiting.

Standard Command

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<u>3</u> 86 Eı	nhanced

Switches PIF Editor settings to Standard mode.

You can use this command to create a PIF for a non-Windows application that will run in standard and 386 enhanced modes. For example, you could specify the PIF options you want in 386 enhanced mode, then choose this command and specify the options you want in standard mode.

Related Procedures

Procedures

<u>Changing PIF Modes</u> <u>Creating New PIFs from Scratch</u>

386 Enhanced Command

<u>M</u> ode	
<u>S</u> tanda	ard
√ <u>3</u> 86 Ei	nhanced

Switches PIF Editor settings to 386 Enhanced mode.

You can use this command to create a PIF for a non-Windows application that will run in standard and 386 enhanced modes. For example, you could specify the PIF options you want in standard mode, then choose this command and specify the options you want in 386 enhanced mode.

Related Procedures

Procedures

<u>Changing PIF Modes</u> <u>Creating New PIFs from Scratch</u>

Click, a folder or topic title.	



-PIF Editor Procedures-

Click a folder or topic title.



<u>Changing PIF Modes</u> <u>Copying PIFs from Other Disks</u> <u>Creating New PIFs from Scratch</u> <u>Creating PIFs for Batch Files</u> <u>Modifying the Standard PIF Settings</u> <u>Editing PIFs</u>

Changing PIF Modes

When you start PIF Editor, it automatically displays the correct options for the mode you are running Windows in. Occasionally, you might want to specify PIF options for a mode you are not currently running Windows in. Click for examples.

To change PIF modes:

Choose the mode you want from the Mode menu.

If you want to run an application in real mode, choose Standard.

If you choose the mode you are not currently running, PIF Editor displays a message warning you that these are the wrong options for the current mode. If you really want to switch PIF modes, click OK.

Related Topics

Keyboard Procedure

Concept

PIF Modes

Options

Advanced Options for 386 Enhanced Mode Windows 386 Enhanced Mode Options Windows Standard Mode Options

example

You might be running Windows in 386 enhanced mode, but want to set PIF options for an application that runs only in real mode. In that case, you would want to change the PIF mode before creating a PIF for that application.

You might also want to create a PIF for an application that will run in both standard and 386 enhanced modes. In that case, you would set the options in one PIF mode, then change PIF modes, set the options, and save the PIF.

Most options have effect only in the mode for which they are entered. For example, you can enter two different values for the Optional Parameters option: one for use with standard mode and one for use with 386 enhanced mode. However, a few options, such as Program Filename and Window Title, are common to both modes.

Copying PIFs from Other Disks

Your <u>non-Windows application</u> might come with its own PIF. Check the application's documentation or the application disks themselves for a file with the .PIF extension.

Some applications come with PIFs that are designed for IBM's TopView system. You can use a TopView PIF in the same way that you use a Windows PIF. You can also use the advanced settings available for Windows PIFs by opening the TopView PIF in PIF Editor and saving it again.

To copy a PIF from another disk to your Windows directory:

- 1 Insert the disk that contains the PIF into drive A.
- 2 Start or switch to File Manager.
- 3 Select the A disk-drive icon.
- 4 Double-click the A:\ directory icon or press ENTER.

File Manager lists the files on the disk. Look for the appropriate file with the .PIF filename extension.

- 5 Select the PIF you want to copy and choose Copy from the File menu.
- 6 Type the destination directory in the To box.

In general, you should install PIFs in your Windows directory, but you can also install a PIF in the same directory as the associated application file.

7 Choose Copy.

Add the application to a Program Manager group as you would any application. When you start the application, Windows looks for that application's PIF. A typical PIF's filename matches the associated application (for example, the PIF for MYAPP.COM would be MYAPP.PIF).

If the application does not run properly, you might have to change the settings in its PIF.



Related Procedures

Keyboard Procedure

Procedures

Selecting a Disk Drive Selecting a File or Directory Starting Applications Switching Among Application Windows

Creating New PIFs from Scratch

You can create a PIF for a <u>non-Windows application</u> that will run in real, standard, or 386 enhanced mode. You can also create a PIF for an application that will run in both 386 enhanced and standard modes.

To create a new PIF from scratch:

- 1 Choose Standard or 386 Enhanced from the Mode menu if you want to change PIF modes. When you start PIF Editor, it automatically displays the correct options for the mode you are running Windows in. You should choose a command from the Mode menu only if you want to create a PIF for an application that will run in a mode you are not currently running Windows in.
- 2 Choose New from the File menu.
- 3 Specify the options that apply to the application.
- 4 Choose Standard or 386 Enhanced to switch to the other PIF mode if you plan to run the application in both standard and 386 enhanced modes.

By switching PIF modes, you can create a PIF for a non-Windows application that will run in both standard and 386 enhanced modes.

- 5 Specify the appropriate options for that mode.
- 6 Choose Save As from the File menu.
- 7 Type the filename with .PIF as the extension.
- 8 Click OK.

To create a new PIF automatically:

- 1 Start Windows Setup.
- 2 Set up the application for use with Windows.
- Related Topics
- Keyboard Procedure

Concept

PIF Modes

Procedures

Changing PIF Modes Setting Up Applications

Creating PIFs for Batch Files

You can create a PIF for an <u>MS-DOS batch file</u> you want to run with Windows. To run the batch file from Windows, you must create a PIF for it.

To create a PIF for a batch file:

- 1 Type the filename and extension of the batch file in the Program Filename text box.
- 2 Set other PIF options as appropriate.

The options you set affect all applications that the batch file starts.

- 3 Choose Save As from the File menu.
- 4 Click OK to use the PIF filename that PIF Editor suggests.

Or type a filename for the PIF in the Filename text box, including the .PIF extension.

Run the batch file by choosing the PIF from File Manager. Or, you can add a program item icon for the PIF to Program Manager, then choose the icon to run the batch file.

Related Topics

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Keyboard Procedure

Concept Ways to Start an Application with a PIE

Procedure

Starting Applications

MS-DOS batch file

A text file that contains MS-DOS commands. When you run a batch file, MS-DOS executes each command in the file. A batch file can be particularly useful for running other commands before or after running a non-Windows application. For example, the commands in a batch file might first load a memory-resident program the application needs, then run the application itself. The following is a sample batch file called SKFWLOAD.BAT, which you could create using Notepad:

SK.COM

FW.EXE

The first line in the batch file loads a pop-up program, SideKick (SK.COM). The second line starts the application Framework II (FW.EXE).

Modifying the Standard PIF Settings

When you start a <u>non-Windows application</u> and Windows can't find a PIF for the application, it starts the application using the standard settings. You can override these settings by creating a PIF with the filename DEFAULT.PIF. Click for an example.

To override the standard PIF settings:

- 1 Change the settings in PIF Editor as appropriate.
- 2 Leave the Windows Title option blank.
- 3 Type a valid program pathname in the Program Filename text box.

For example, you might type **c:\command.com**.

Windows ignores certain settings, such as Program Filename, when it uses the settings in _DEFAULT.PIF to start an application. However, because PIF Editor still verifies the contents of these fields, you should still provide complete valid settings.

- 4 Choose Save As from the File menu.
- 5 Type _default.pif in the Filename box.
- 6 Click OK.

From now on, whenever Windows can't find an application's PIF, it will start the application using the settings in the _DEFAULT.PIF file rather than using Windows' standard PIF settings. You can change your standard settings by editing the file _DEFAULT.PIF as you would any PIF. To restore Windows' standard settings, just delete the file _DEFAULT.PIF.

The settings in _DEFAULT.PIF do not affect the settings PIF Editor displays for a new, untitled PIF (the settings you see when you choose New from the File menu). PIF Editor always uses Windows' standard PIF settings when creating an untitled PIF.



Keyboard Procedure

example

You might want to override the standard settings if, for example, you are running Windows in 386 enhanced mode and you want all applications without PIFs to start in a window rather than in a full-screen display.

Editing PIFs

When an application doesn't run properly, you can try editing its PIF.

To edit a PIF:

- 1 Choose Open from the PIF Editor File menu.
- 2 If the file is in the current directory, double-click the name of the file in the Files box.If the file is not in the current directory, double-click the directory you want in the Directories box. Then double-click the name of the file in the Files box.
- 3 Specify the options that you want to change.

Click for examples of options you might want to change.

4 Choose Save from the File menu.



Related Procedure Keyboard Procedure

hint

The current directory is shown below the Filename box. Double-clicking the two periods [..] at the top of the Directories box shows the files and directories located one level closer to a disk's root directory.

Instead of using the Files and Directories list boxes to open a file, you can type the complete pathname in the Filename box and click OK.

example

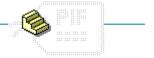
You might want to

- - Change the pathname for your application. Specify a program parameter or change the default directory that contains your application's files.
- Give it more or all available memory. Run it in a window (this requires more memory than running it full screen).
 - Change the PIF so that the application will run in a different mode.

Click D for examples.

-PIF Editor Keyboard Procedures-

Click a folder or topic title.



<u>Changing PIF Modes</u> <u>Copying PIFs from Other Disks</u> <u>Creating New PIFs from Scratch</u> <u>Creating PIFs for Batch Files</u> <u>Modifying the Standard PIF Settings</u> <u>Editing PIFs</u>

Keyboard: Changing PIF Modes

To display different PIF options:

- 1 Press ALT and then M.
- 2 Press S (Standard) or 3 (386 Enhanced).
 Press S (Standard) or 3 (386 Enhanced).
 Related Options
 Mouse Procedure
- Ē

Options

Advanced Options for 386 Enhanced Mode Windows 386 Enhanced Mode Options Windows Standard Mode Options

Keyboard: Copying PIFs from Other Disks

To copy a PIF from another disk to your Windows directory:

- 1 Insert the disk that contains the PIF into drive A.
- 2 Start or switch to File Manager.
- 3 Select the A disk-drive icon.
- 4 Press ENTER to open a directory window for the A drive.
- 5 Select the PIF you want to copy, and press F8.
- 6 Type the destination directory in the To box.

7 Press ENTER.

- **Related Procedures** \square
 - Mouse Procedure

Procedures

Selecting a Disk Drive Selecting a File or Directory Starting Applications Switching Among Application Windows

Keyboard: Creating New PIFs from Scratch

To create a new PIF from scratch:

- 1 Choose <u>Standard or 386 Enhanced</u> from the Mode menu.
- 2 Press ALT and then F.
- 3 Press N.
- 4 Specify the options that apply to the application.
- 5 Choose Standard or 386 Enhanced to switch to the other mode if you plan to run the application in both modes.
- 6 Specify the appropriate options for that mode.
- 7 Press ALT and then F.
- 8 Press A.
- 9 Type the complete pathname with .PIF as the extension. Then press ENTER. Or complete steps 10 through 12.
- 10 Type the filename with PIF as the extension.
- 11 Press ALT+D and use the UP ARROW or DOWN ARROW key to select the directory you want. Or skip this step to save the PIF in the current directory.
- 12 Press ENTER.

To create a new PIF automatically:

- 1 Start Windows Setup.
- 2 Set up the application for use with Windows.
- Related Procedure
- Mouse Procedure

Keyboard: Creating PIFs for Batch Files

To create a PIF for a batch file:

- 1 Type the filename and extension of the batch file in the Program Filename text box.
- 2 Set any other PIF options you want to specify.
- 3 Press ALT and then F.
- 4 Press A.
- 5 Press ENTER to use the PIF filename that PIF Editor suggests. Or complete the following steps.
- 6 Type a filename for the PIF in the Filename text box, including the .PIF extension.
- 7 Press ALT+D and use the UP ARROW or DOWN ARROW key to select the directory you want. Or skip this step to save the PIF in the current directory.
- 8 Press ENTER.

 \square Related Procedure $\overline{}$

Mouse Procedure

Keyboard: Modifying the Standard PIF Settings

To override the standard PIF settings:

- 1 Change the settings in PIF Editor as appropriate.
- 2 Leave the Windows Title option blank.
- 3 Press ALT+P and type a valid program pathname in the Program Filename text box.
- 4 Press ALT and then F.
- 5 Press A.
- 6 Type _default.pif in the Filename box.

7 Press ENTER.

- Related Procedure
- Mouse Procedure

Keyboard: Editing PIFs

To edit a PIF:

- 1 Press ALT and then F.
- 2 Press o.
- 3 If the file is in the current directory, press ALT+F and use the UP ARROW or DOWN ARROW key to select the file.

If the file is not in the current directory, press ALT+D, use the UP ARROW or DOWN ARROW key to select a drive or directory, and press ENTER. Then press ALT+F and use the UP ARROW or DOWN ARROW key to select the file.

- 4 Press enter. 🛨
- 5 Specify the options that you want to change.
- 6 Press ALT and then F.
- 7 Press s.

 \square

 \square

- Related Procedure
- Mouse Procedure

hint

The current directory is shown below the Filename box. Choosing the two periods [..] at the top of the Directories box shows the files and directories located one level closer to a disk's root directory.

hint

Instead of using the Files and Directories list boxes to open a file, you can type the complete pathname in the Filename box and press ENTER.

-PIF Editor Keys-



То	Press
Move from option to option (left to right and top to bottom)	ТАВ
Move from option to option in reverse order	SHIFT+TAB
Move to the option or group whose underlined letter matches the one you type	ALT+letter
Move from option to option within a group of options	arrow keys
Select or clear a check box	SPACEBAR
Switch to the next application window or minimized icon, including <u>full-screen</u> applications	ALT+ESC

Click a folder or topic title.	

Windows Standard Mode Options
Windows 386 Enhanced Mode Options
Advanced Options for 386 Enhanced Mode

Click a folder or topic title.	

Windows Standard Mode Options
Program Filename
Window Title
Optional Parameters
Start-up Directory
Video Mode
Memory Requirements
XMS Memory
Directly Modifies (Communications Ports)
Directly Modifies (Keyboard)
No Screen Exchange
Prevent Program Switch
Close Window on Exit
Reserve Shortcut Keys Windows 386 Enhanced Mode Options
Advanced Options for 386 Enhanced Mode

-----PIF Editor Options Click a folder or topic title.

Windows Standard Mode Options Windows 386 Enhanced Mode Options Program Filename Window Title Optional Parameters

- Start-up Directory

 Memory Requirements

 Display Usage

 Execution Background

 Execution Exclusive

 Close Window on Exit
- Advanced Options for 386 Enhanced Mode

-PIF Editor Options -

Click a folder or topic title.

<u>Windows Standard Mode Options</u>
 <u>Windows 386 Enhanced Mode Options</u>
 <u>Advanced Options for 386 Enhanced Mode</u>

Background and Foreground Priority Detect Idle Time EMS Memory XMS Memory Uses High Memory Area Lock Application Memory Video Memory Monitor Ports Emulate Text Mode Retain Video Memory Allow Fast Paste Allow Close When Active Reserve Shortcut Keys Application Shortcut Key

Program Filename

In this text box, you specify a path for the application, including the drive, directory, and the extension for the command file--for example, C:\MULTIPLAN\MP.COM. You must make an entry in this box. Be sure to include the complete path for the program filename and also include the extension.

If you want to use the PIF when you run the application, make sure the program name in Program Manager matches the program filename you want to use. For example, if the filename is MP.COM (Multiplan), you would use the name MP.PIF.

If you run the application by choosing the PIF itself from File Manager, the two names need not match. For example, you might want to create more than one PIF for an application, each with a different name and different settings. However, when the names do not match, the PIF is only used when you run the application by choosing the PIF itself.

You may want to run other commands before your application--for example, Set commands or those that load memory-resident applications. You can put these commands in a batch file. The following is an example of how you would set up a batch file for an application such as Multiplan:

Create MP.BAT (with a text editor such as Notepad) and make the last command MP.PIF.

Related Options

Options

Optional Parameters Start-up Directory Window Title

Window Title

In this text box, you can specify a descriptive name that will appear in the window's title bar when you run the application. This entry is optional.

If you leave this text box blank, the title bar will display the name of the PIF without the extension .PIF. Related Option

Optional Parameters

In this text box, you specify any parameters your application might need. These are the same parameters you would type after the application's filename when starting the program outside Windows. For example, to run Microsoft Word in character mode, type /c in this box. If your application doesn't require parameters or if you are uncertain about what parameters to specify, leave this text box blank.

Parameters can be filenames, letters, numbers, or any type of information up to 62 characters in length. See the application documentation for valid parameters. If your application doesn't require parameters or you don't want to use them, leave this box blank.

If you want Windows to prompt you for parameters, type a question mark. When starting the application, you will be prompted to supply the parameters you want.

If you choose the Run command in Program Manager or File Manager, you can override the program parameters specified in the PIF by typing parameters after the program name.

Start-up Directory

In this text box, you specify the drive and directory you want Windows to go to when you start the application. This is usually the location of the application or the application's files. This entry is optional. If you want Windows to determine the start-up directory, leave this option blank.

Some applications require that certain files be located in the same path as the application. In this case, you should specify a start-up directory location that is the same as that of the files. Ò

Video Mode

With the Video Mode option, you can specify whether Windows should reserve enough memory to run your application in text mode or in graphics/multiple text mode. ("Multiple text" refers to applications that use multiple text pages to display multiple text screens that can be selected.) The Video Mode option tells Windows how much memory it will need for saving and restoring the video state, and for copying the screen contents onto the Clipboard.

The amount of memory allocated for these functions should be as small as possible, so that more memory is available for other uses. Since text mode uses less memory, you may want to try choosing Text first if you are uncertain about which option to choose.

For an application that runs in both text and graphics mode, select Graphics/Multiple Text.

Memory Requirements

In this text box, you can specify an amount of memory in kilobytes (KB) that will be required for the application. Check the system requirements for your application. If you don't know how much is required, leave the setting as it is.

If you are running other applications and Windows cannot provide the specified amount of memory when you start the application, you will see the message "Not enough memory to run." You may need to close some applications before continuing.

Note that the value for this option specifies the amount of memory available for the application, not the total size including DOS, device drivers, and so on.

XMS Memory

In the XMS Memory text boxes, you can specify the amount of extended memory you want set aside for your application. If you have extended memory in your computer that conforms to the Lotus-Intel-Microsoft (LIM) eXtended Memory Specification, version 2.0 or greater, you can use these settings.

This option	Sets
KB Required	A minimum amount of required extended memory in kilobytes (KB). Check the system requirements for your application. If you don't know how much is required, leave the setting as it is.
	If you are running other applications and Windows cannot provide the specified amount of memory when you start the application, you will see the message "Not enough memory to run." You may need to close some applications before continuing.
	Use a setting of 0 for applications which do not use extended memory.
KB Limit	The maximum amount of extended memory in kilobytes (KB) that will be allocated to the application.
	This setting prevents XMS-using applications from tying up all available extended memory blocks when they will not use them all. It is also used for limiting an application's use of extended memory so that the application will run better with other applications that use extended memory.
	The default setting is 0. A setting of -1 allocates as much extended memory to an application as it asks for up to the limit of system memory. A setting of 0 will prevent the application from gaining access to any extended memory, except in the high memory area (HMA).
C Related	Option

Directly Modifies (Communications Ports)

Some applications use system resources in ways that prevent sharing with other applications. For each serial communications port (COM1, COM2, COM3, COM4) that your application accesses, select the check box. If you are running a communications program, you should check these boxes.

Selecting this option prevents two applications from trying to access the same communications port at once. It also prevents the application from swapping to disk.

Directly Modifies (Keyboard)

Some applications use system resources in ways that prevent sharing with other applications. Select the Keyboard check box if the application accesses the keyboard buffer, which is the area in memory that remembers keys that were typed, even if the computer was busy and not responding to the keyboard when you typed them. If you are uncertain about whether the application accesses the keyboard buffer, do not select this option.

Selecting this option allows your program exclusive access to the keyboard and prevents switching back to Windows with ALT+TAB, ALT+ESC, and CTRL+ESC.

No Screen Exchange

Selecting this check box prevents you from using ALT+PRINT SCREEN and PRINT SCREEN to put "snapshots" of the screen onto Clipboard. If you are uncertain about whether you should select this option, do not select this check box.

Selecting this option keeps Windows from allocating memory for the screen exchange function and thus frees memory for running the application.

Prevent Program Switch

Selecting this check box prevents you from using ALT+TAB, ALT+ESC, or CTRL+ESC to switch back to Windows from the application. If you are uncertain about whether you should select this option, do not select this check box.

Selecting this option keeps Windows from allocating memory for program switching and thus frees memory for running the application.

Select this option if you find that the application does not switch to Windows correctly. Also select this option when the application is a BASIC program that uses the communications port.

If you select this option, you must quit the application in order to return to Windows.

Close Window on Exit

When you quit a <u>non-Windows application</u>, the window (or screen) closes automatically. If you want the window to remain open so that you can look at the information on the screen, select this check box.

Reserve Shortcut Keys

Selecting the check boxes for the <u>shortcut keys</u> (ALT+TAB, ALT+ESC, CTRL+ESC, ALT+PRINT SCREEN, PRINT SCREEN) reserves them for use by the application instead of by Windows.

If your application uses these shortcut keys, select the check box. This selection disables the Windows functions for the keys and allows the application to use them while the application is the current application. (When the application is not the current application, the shortcut keys have Windows functions.)

Program Filename

In this text box, you specify a path for the application, including the drive, directory, and the extension for the command file--for example, C:\MULTIPLAN\MP.COM. You must make an entry in this box. Be sure to include the complete path for the program filename and also include the extension.

If you want to use the PIF when you run the application, make sure the program name in Program Manager matches the program filename you want to use. For example, if the filename is MP.COM (Multiplan), you would use the name MP.PIF.

If you run the application by choosing the PIF itself from File Manager, the two names need not match. For example, you might want to create more than one PIF for an application, each with a different name and different settings. However, when the names do not match, the PIF is only used when you run the application by choosing the PIF itself.

You may want to run other commands before your application--for example, Set commands or those that load memory-resident applications. You can put these commands in a batch file. The following is an example of how you would set up a batch file for an application such as Multiplan:

Create MP.BAT (with a text editor such as Notepad) and make the last command MP.PIF.

Related Options

Options

Optional Parameters Start-up Directory Window Title

Window Title

In this text box, you can specify a descriptive name that will appear in the window's title bar when you run the application. This entry is optional.

If you leave this text box blank, the title bar will display the name of the PIF without the extension .PIF. Related Option

Optional Parameters

In this text box, you specify any parameters your application might need. These are the same parameters you would type after the application's filename when starting the program outside Windows. For example, to run Microsoft Word in character mode, type /c in this box. If your application doesn't require parameters or if you are uncertain about what parameters to specify, leave this text box blank.

Parameters can be filenames, letters, numbers, or any type of information up to 62 characters in length. See the application documentation for valid parameters. If your application doesn't require parameters or you don't want to use them, leave this box blank.

If you want Windows to prompt you for parameters, type a question mark. When starting the application, you will be prompted to supply the parameters you want.

If you choose the Run command in Program Manager or File Manager, you can override the program parameters specified in the PIF by typing parameters after the program name.

Start-up Directory

In this text box, you specify the drive and directory you want Windows to go to when you start the application. This is usually the location of the application or the application's files. This entry is optional. If you want Windows to determine the start-up directory, leave this option blank.

Some applications require that certain files be located in the same path as the application. In this case, you should specify a start-up directory location that is the same as that of the files. Ò

Memory Requirements

These settings allocate memory to the application. If you leave the settings blank, Windows will allocate 640K of memory to the application if the memory is available.

Note that the values for these settings specify the amount of memory available for the application, not the total size including DOS, device drivers, and so on.

This setting	Specifies
KB Required The minimum amount of memory in kilobytes (KB) that your application red Check the system requirements of your application. If you don't know how required, leave the setting as it is.	
	If you are running other applications and Windows cannot provide the specified amount of memory when you start the application, you will see the message "Not enough memory to run." You may need to close some applications or use a larger number before continuing.
	Entering 0 indicates that the application has no minimum memory requirement; therefore, Windows will allocate to the application whatever memory is available. Enter -1 to allocate as much memory as possible to the application.
KB Desired	The maximum amount of memory that your application can use. Some applications run better if more than minimal memory is provided. The limit is 640K.
	Enter -1 to allocate as much memory as possible to the application.

Display Usage

The Full Screen and Windowed options control how the application screen is initially displayed.

This option	Starts
Full Screen	The application full-screen (without a window).
	Running an application full-screen saves memory. You'll be able to switch between a <u>full-screen application</u> and Windows by pressing ALT+TAB. However, you cannot share information between full-screen applications and other applications as easily as if they were running in a window. (You can press ALT+PRINT SCREEN to load an entire screen onto Clipboard when an application is running full-screen.)
Windowed	To put an application in a window while using it, press ALT+ENTER. Some applications can only run full-screen because they display graphics, or they have direct access to the part of memory used by the screen. In these cases, you'll get a message that you can't switch to a window. The application in a window.

Execution Background

If you want the application to be able to run when it is not the current application, select the Background check box.

If you select the option, the application will run in the background (calculating numbers, for example) while another application has focus in the foreground. If you don't select this option, the application will run only when it is switched to the foreground.

Execution Exclusive

If you want the application to have exclusive use of resources when it is the current application, select this check box. If you select the option, no other applications, including those with the Background option set, will run when this application is in the foreground.

This option controls the behavior of the application only when it is the current application. Use the Background option to control its behavior when it is in the background.

You can select this option for applications running both in a window and running full-screen. However, an application running in a window will not actually receive all the computer's memory resources. Some memory will be reserved for Windows to manage the screen display.

Close Window on Exit

When you quit a <u>non-Windows application</u>, the window (or screen) closes automatically. If you want the window to remain open so that you can look at the information on the screen, select this check box.

Background and Foreground Priority

When you specify priority, you are determining the allocation of CPU resources to the applications. The numbers you specify in the Background and Foreground text boxes set the priority of the application relative to the other applications that are running. (Therefore, these numbers cannot be translated into a fixed percentage of CPU time.) The larger the priority you give an application, the more CPU resources are allocated to it.

Priorities range from 1 to 10,000. Normal priority is 100 (with the possibility of other applications having 100 times greater and 100 times less priority).

The Foreground Priority is the application's priority when it is the current application.

The Background Priority is the application's priority when it is not the current application. (This setting is ignored if the <u>Execution Background option</u> is not set.)

Detect Idle Time

If you select this check box, Windows will give CPU resources to another application when this application is waiting for keyboard input.

Generally, you should check this option because it allows other applications to run faster.

Some applications will not run correctly with this option selected. The only way to determine if the application will work is to select this option and see if it runs more slowly. If not, leaving this box checked will allow other applications in the background to run faster.

EMS Memory

EMS Memory options let you specify the amount of expanded memory to allocate to an application. If your application makes use of expanded memory, you should set EMS options rather than XMS options.

Note: When running in virtual mode, Windows allocates EMS and XMS memory from the same memory pool, using the application's memory strategy: either the Lotus-Intel-Microsoft (LIM) Expanded Memory Specification or Lotus-Intel-Microsoft (LIM) eXtended Memory Specification.

Specifies
The minimum amount of expanded memory in kilobytes (KB) that your application requires. See the application's documentation for this information. If you don't know how much EMS memory is required, leave the setting as it is.
If Windows cannot provide the specified amount of memory, and you are running other applications, you will see the message "Not enough memory to run." You may need to close some applications before continuing.
A setting of 0 is appropriate for applications that do not use LIM 4.0 expanded memory.
The maximum amount of LIM 4.0 expanded memory your application is allowed to use. This option is provided to prevent an application from taking more expanded memory than it needs. Setting this option also limits an application's use of expanded memory so that it will run better with other applications that use LIM 4.0 memory.
The default setting is 1024. A setting of -1 allocates as much expanded memory to an application as it asks for, up to the limit of system memory. A setting of 0 will prevent the application from gaining access to any EMS memory.
That the memory allocated to the application is locked into actual physical RAM. Most applications will run well with expanded memory unlocked. The advantage of having the memory unlocked is that it allows your application to use virtual memory. This means that if the application needs more memory than is physically in your computer, it will swap the least used information to disk, giving the appearance of more memory than is actually present.
Two cases where the application will not run well with the expanded memory unlocked are when you have a memory-resident application that uses expanded memory at interrupt time, or when you have a DOS device driver that uses expanded memory. In these cases, the application may need to be in physical RAM to work. tions

Options Memory Requirements XMS Memory

XMS Memory

XMS memory options specify the extended memory available to your application. If you have installed extended memory that conforms to the Lotus-Intel-Microsoft (LIM) eXtended Memory Specification, version 2.0 or greater, you can specify XMS settings.

This setting	Specifies
KB Required	The minimum amount of required extended memory in kilobytes (KB) your application needs to run. Check the system requirements for your application. If you don't know how much is required, leave the setting as it is.
	If you are running other applications and Windows cannot provide the specified amount of memory when you start the application, you will see the message "Not enough memory to run." You may need to close some applications before continuing.
	Use a setting of 0 for applications which do not use extended memory.
KB Limit	The maximum amount of extended memory in kilobytes (KB) that will be allocated to the application.
	This setting prevents XMS-using applications from tying up all available extended memory blocks when they are not going to use them all. This allows the application to run better with other applications that use extended memory.
	The default setting is 1024. A setting of -1 allocates as much extended memory to an application as it asks for, up to the limit of system memory. A setting of 0 will prevent the application from gaining access to any extended memory, except the high memory area (HMA).
Locked	That the memory allocated to the application is locked into actual physical RAM. Most applications will run well with extended memory unlocked. The advantage of having the memory unlocked is that it allows your application to use virtual memory. This means that if the application needs more memory than is physically in your computer, it will swap the least used information to disk, giving the appearance of having more memory than is actually present.
	Two cases when the application will not run well with the extended memory unlocked are when you have a memory-resident application that uses memory at interrupt time, or when you have a DOS device driver that uses memory. In these cases, the application may need to reside in physical RAM to work.
	The High Memory Area (HMA) is always locked and therefore this setting has no effect on it.
Related C	Options

Options

EMS Memory Memory Requirements

Uses High Memory Area

When you select this check box, you specify that an application will have access to the high memory area (HMA). If you have installed extended memory that conforms to the Lotus-Intel-Microsoft (LIM) eXtended Memory Specification, version 2.0 or greater, you can use this setting.

The HMA is a system resource that only one application at a time can use. In most cases, you can choose this option because each application has its own HMA, which is independent of all the other applications' HMAs. However, you should turn off this check box when you don't want a particular application to vie for a specific HMA.

Related Options

Options

EMS Memory XMS Memory

Lock Application Memory

Selecting this check box overrides the application's normal switching from real memory to disk, and forces all of the application's DOS memory to be in real memory when the application is running. Generally, you should not select this option, since it limits the number of applications you will be able to run with Windows. The option is provided to help applications whose performance or correct functioning is severely affected by the extra time that is required to read and write memory from disk.

Note also that this option applies only to the main application memory and does not apply to XMS or EMS memory.

Related Options

Options

EMS Memory XMS Memory

Video Memory

With this option, you specify the video mode you want the application to start in. Windows will allocate system memory to display the application screen in accordance with the video mode you specify. Text mode uses the least amount of memory and High (resolution) Graphics mode uses the most.

If the application does not have enough memory for saving the video memory, you will not be able to start the application after specifying the mode. Instead, Windows will give you a message that it has insufficient memory to run the application.

Some applications can run in several modes. If you change to a mode that requires less memory or if you run an application full-screen, Windows releases the extra memory for use by other applications. If you change back to a mode that requires more memory for video display, it may not be available, and the application display may be partially or totally lost.

If you want to prevent this from occurring when you change modes, you can select both the High Graphics option button and the Retain Video Memory check box. That way, you will always have the memory needed to display the application, regardless of the mode the application is running in. However, you will have less available memory for other applications, which means you may not have enough memory to run them.

Some adaptors, such as the Hercules and CGA, have only one graphics mode, so there is no difference between the Low Graphics and High Graphics options.

Related Options

 \sim

Options

<u>Monitor Ports</u> <u>Retain Video Memory</u>

Monitor Ports

This option tells Windows to verify that the values assigned to the video adaptor are the same as those used by the application when it is running in a specified mode (Text, Low Graphics, or High Graphics). For example, both the video adaptor and the application can determine what the cursor looks like. As long as the values are the same, these options are not needed. However, the application may not display correctly if its values and the video adaptor's values differ.

If you do not choose any of the Monitor Ports options and the application's screen is not restored correctly when the application is made full-screen, choose the option that corresponds to the mode the application is running in. If the screen is still not restored correctly, choose the other Monitor Ports options one by one.

When none of these options is selected, the application will access the full-screen display more quickly. However, you run the risk of being unable to restore your application's display properly. These options have no effect when the application is running in a window.

Choosing these options will not affect some display adapters, such as the IBM VGA adapter.

This option	Tells
Text	Windows to monitor the ports associated with text mode displays.
Low Graphics	Windows to monitor the ports associated with low resolution graphics mode displays.
	CGA mode screens are low graphics.
High Graphics	Windows to monitor the ports associated with high resolution graphics mode displays.
Related	EGA mode screens are high graphics. Option

Emulate Text Mode

Many applications run with the display in text mode and use the standard ROM BIOS services for their output. If you select this option, the display update of these applications will run faster.

If the application's display gets garbled or the cursor appears in the wrong place, turn off this check box.

Retain Video Memory

If you select this check box, Windows will set the amount of memory needed for the start-up video mode and will not give back any memory to the system, even if you switch video modes while running the application.

A single application may run in several different video modes. If this option is not checked, Windows will adjust the system memory allocated to the application according to the video mode the application is running in. If the memory needed is smaller in the new mode, video memory will be returned to the system so that it can be used by other applications. This means that if the application switches back into a video mode that requires more memory, the memory may not be available, and you may lose the application's screen.

Related Option

Allow Fast Paste

If you select this check box, the application will paste information using a faster method. Because some applications cannot paste properly using this method, you will need to test it by trying to paste information from Clipboard to the application. If the paste is successful, you can use the option.

Allow Close When Active

If you select this check box, Windows will be able to close an application when you exit Windows. This feature allows you to exit Windows without having to quit the <u>active</u> application first. If you select this option, you will see a confirmation message about quitting the application when you exit Windows.

If you are uncertain about whether to select this option, do not select the check box. Choosing this option could result in data loss and damage to DOS files, because many standard applications will not be allowed to close their open files and copy the contents of their buffers to disk. This could result in a wholesale loss of data.

This option should only be set for applications that do not write to the disk. PIFs for applications that use the disk regularly, such as word processors, data bases, and spreadsheets, should never check this option.

Reserve Shortcut Keys

Selecting the check boxes for the <u>shortcut keys</u> (ALT+TAB, ALT+ESC, CTRL+ESC, ALT+PRINT SCREEN, ALT+SPACEBAR, ALT+ENTER, PRINT SCREEN) disables the Windows functions for the keys and allows the application to use them while the application is the current application. (When the application is not the current application, the shortcut keys have Windows functions.)

If your application uses a Windows shortcut key, select the check box. This selection lets you use the shortcut key in the application but prevents you from using it in Windows.

Application Shortcut Key

In this text box, you can enter a key combination (or <u>shortcut key</u>) that causes the application to become the current application when it is pressed. Shortcut keys must have an Alt or Ctrl modifier. Shift can also be specified, but it is not allowed by itself.

To enter the shortcut key, press the key combination you want to use. If there is something wrong with the shortcut key definition, a dialog box will appear and the shortcut key will be reset. (You can't use as shortcut keys the keys and key combinations reserved for working within the option and dialog box.) When you are finished, press Enter to accept the settings in the dialog box or press Tab to move to another option. Use Backspace to delete a shortcut key definition and Shift+Backspace to set the definition to none. (You cannot otherwise edit a definition.)

The shortcut key you specify will work system-wide. This means no other application, including a Windows application, is allowed to use the key combination. For this reason, shortcut keys must be selected carefully. For instance, you cannot specify a shortcut key that conflicts with the Windows shortcut keys. Also, if the shortcut key conflicts with an accelerator key in a Windows application or dialog box, the accelerator will be disabled. You should also specify a shortcut key that will not conflict with any shortcut keys defined by another <u>non-Windows application</u>.

Related Option

Click a folder or topic title.	

PIF Editor Quick Looks

-PIF Editor Quick Look-

Click a folder or topic title.



PIF Editor Quick Looks

Standard Mode 386 Enhanced Mode Advanced Options

PIF Editor

Lets you create and change program information files (PIFs). A PIF contains information that determines how a particular non-Windows application runs with Windows.

application Control-menu

-		
<u>R</u> estore		
<u>M</u> ove		
5	Size	
h	vli <u>n</u> imize	
h	Ma <u>x</u> imize	
<u>(</u>	<u>C</u> lose	
5	S <u>w</u> itch To	

Restores the application window to its former size. Moves the application window to another location. Changes the size of the application window. Shrinks the application window to an icon. Enlarges the application window to its maximum size. Closes the application window.

Starts Windows Task List.

PIF Editor - WP.PIF -**▼** ▲ title bar

Contains the title of the application running in the window, in this case PIF Editor. The title bar also shows the file that's open.

Drag the title bar to move an application window on the screen.

title bar

-

Advanced Options

Contains the title of the dialog box, in this case Advanced Options. Drag the title bar to move the window on the screen.



Click the Minimize button to shrink the PIF Editor window to an icon.

Maximize button

 \square

Click the Maximize button to enlarge the PIF Editor window to its maximum size.

File menu	
<u>F</u> ile	
<u>N</u> ew	Creates a new PIF with standard settings.
<u>O</u> pen	Opens an existing PIF.
<u>S</u> ave	Saves changes to the current PIF.
Save <u>A</u> s	Saves a new or an existing PIF under a new name.
E <u>x</u> it	Exits PIF Editor and closes the PIF Editor window.

Mode menu

<u>M</u>ode

<u>S</u>tandard <u>3</u>86 Enhanced Switches PIF Editor settings to Standard mode. Switches PIF Editor settings to 386 Enhanced mode. Help menu

<u>H</u>elp

<u>I</u> ndex	
<u>K</u> eyboard	
<u>C</u> ommands	
<u>P</u> rocedures	
<u>S</u> tandard Options	
386 Enchanced Options	
<u>A</u> dvanced Options	
<u>U</u> sing Help	

About PIF Editor ...

Displays an alphabetical list of all Help topics. Displays Help on PIF Editor key combinations. Displays Help on PIF Editor commands. Displays Help on PIF Editor procedures. Displays Help on PIF Editor standard mode options. Displays Help on PIF Editor 386 enhanced mode options. Displays Help on PIF Editor advanced options. Displays Help on PIF Editor advanced options.

Displays important information about PIF Editor.

menu bar <u>F</u>ile <u>M</u>ode <u>H</u>elp

Contains the names of all the PIF Editor menus.

Click a menu name to display the menu commands.

Program Filename

Specifies a path for the program file or the .BAT file that starts the program. For example, you might specify **c:\multiplan\mp.com** or **c:\mp.bat**. This pathname indicates to Windows the location of the program file of the non-Windows application You must make an entry in this box. Be sure to include the complete path for the program filename and also include the extension.

Window Title

Specifies the name that will appear in the application's title bar. This entry is optional. If you leave this text box blank, the title bar will display the name of the PIF without the extension .PIF.

Optional Parameters

Specifies the parameters you would type if you were to start the application from MS-DOS. For example, if you normally type **word/c** when you start Microsoft Word from MS-DOS, you would type **/c** in this box. If your application doesn't require parameters or if you are uncertain about what parameters to specify, leave this text box blank.

Start-up Directory

Specifies a pathname if you want the application to start up in a specific directory. For example, you might want to change the start-up directory to the directory that contains the application's data files rather than the directory that contains the application. This entry is optional. If you want Windows to determine the start-up directory, leave this option blank.

Video Mode

Specifies whether Windows should reserve enough memory to run your application in text mode or in graphics/multiple text mode. If your application doesn't run in graphics mode, make sure to choose the text mode option since this mode uses less memory.

Memory Requirements

Tells Windows how much conventional memory the application needs before Windows starts it.

This option refers to the amount of free memory the application needs. Keep in mind that requirements listed in the application's documentation might refer to the total amount of memory your system should have, not to the amount of memory that must be free in order for the application to run.

XMS Memory

Specifies how much extended memory the application will need. Windows is designed to make efficient use of extended memory. However, very few non-Windows applications use extended memory. Therefore, you can usually leave these options at their standard settings.

The KB Required option specifies how much memory must be available at startup. KB Limit restricts the amount of memory the application can have.

Directly Modifies (Communications Ports)

Prevents two applications from trying to access the same communications port at once. It also prevents the application from swapping to disk.

Select the check box for each port that your application accesses. It is particularly important to select the appropriate check boxes if you are running a communications program.

Directly Modifies (Keyboard)

Allows your program exclusive access to the keyboard and prevents switching back to Windows with ALT+TAB, ALT+ESC, and CTRL+ESC.

Select the Keyboard check box if the application accesses the keyboard buffer. If you are uncertain about whether the application accesses the keyboard buffer, do not select this option.

No Screen Exchange

Prevents you from using ALT+PRINT SCREEN and PRINT SCREEN to put "snapshots" of the screen onto the Clipboard.

Selecting this option keeps Windows from allocating memory for the screen exchange function and thus frees memory for running the application. If you are uncertain about whether you should select this option, do not select this check box.

Prevent Program Switch

Prevents you from using ALT+TAB, ALT+ESC, or CTRL+ESC to switch back to Windows from the application.

Select this option if you find that the application does not switch to Windows correctly. Also select this option when the application is a BASIC program that uses a communications port. If you are uncertain about whether you should select this option, do not select this check box.

Close Window on Exit

Causes the window to remain open so that you can look at the information on the screen. Normally, when you quit a non-Windows application, the window (or screen) closes automatically.

Reserve Shortcut Keys

Reserves shortcut keys for use by the non-Windows application instead of by Windows. This option applies only when the application is active. When the application is inactive, the shortcut keys have Windows functions.

Program Filename

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Specifies a pathname if you want the application to start up in a specific directory. For example, you might want to change the start-up directory to the directory that contains the application's data files rather than the directory that contains the application. This entry is optional. If you want Windows to determine the start-up directory, leave this option blank.

Memory Requirements

Tells Windows how much conventional memory the application needs before Windows starts it.

This option refers to the amount of free memory the application needs. Keep in mind that requirements listed in the application's documentation might refer to the total amount of memory your system should have, not to the amount of memory that must be free in order for the application to run.

Display Usage

Specifies whether or not to run the application in a window. When considering this option, keep in mind that an application that runs full-screen uses less memory. Also, some applications cannot run in a window due to the way they use the screen display.

Execution Background

Enables the application to run when it is an inactive application. For example, if you want the application to be able to calculate numbers when it is in the background, select this option.

Execution Exclusive

Enables the application to retain exclusive use of the computer's resources. No other applications will be able to run in the background, including applications for which you selected Background. You might select Exclusive so that the application will run more smoothly or won't be interrupted by another application.

Close Window on Exit

Causes the window to remain open so that you can look at the information on the screen. Normally, when you quit a non-Windows application, the window (or screen) closes automatically.

Advanced button

<u>A</u>dvanced...

Opens the dialog box in which you can set advanced multitasking, memory, display, and other options.

Control-menu



Moves the window to another location. Closes the application window.

Background Priority

Determines how an inactive application runs in relation to other inactive applications and the active application.

The number in the box doesn't represent a percentage of CPU resources. Rather, it sets the priority of the application relative to the other applications that are running. The larger the priority you give the application, the more CPU resources are allocated to it.

Foreground Priority

Determines how an active application runs in relation to the applications in the background.

The number in the box doesn't represent a percentage of CPU resources. Rather, it sets the priority of the application relative to the other applications that are running. The larger the priority you give the application, the more CPU resources are allocated to it.

Detect Idle Time

Gives CPU resources to another application when the application is waiting for keyboard input. Generally, you should select this option because it lets the other applications run faster. However, some communications applications don't run well if Detect Idle Time is selected.

OK button



Tells PIF Editor to use the selections you've made in the dialog box and closes the dialog box.

Cancel button

Cancel

Cancels the selections you've made in the dialog box and closes the dialog box.

EMS Memory

Specifies how much expanded memory the application will need. When you're running in 386 enhanced mode, Windows itself doesn't actually use expanded memory. However, in this mode, Windows can simulate expanded memory for non-Windows applications that need it.

The KB Required option specifies how much memory must be available at startup. KB Limit restricts the amount of memory the application can have.

XMS Memory

Specifies how much extended memory the application will need. Windows is designed to make efficient use of extended memory. However, very few non-Windows applications use extended memory. Therefore, you can usually leave these options at their standard settings.

The KB Required option specifies how much memory must be available at startup. KB Limit restricts the amount of memory the application can have.

Uses High Memory Area

Tells Windows that the application is allowed to use the high memory area (HMA) of RAM.

Keep this option selected for most applications. If the HMA is available and the application uses it, more memory will be available to the application. If the application does not use the HMA, no memory is wasted.

Lock Application Memory

Overrides the application's normal switching from real memory to disk, and forces all of the application's MS-DOS memory to be in real memory when the application is running.

Generally, you should not select this option, since it limits the number of applications you will be able to run with Windows. The option is provided to help applications whose performance or correct functioning is severely affected by the extra time that is required to read and write memory from disk.

Video Memory

Determines how much memory Windows provides for the application's screen display when you start the application. Text mode uses the least amount of memory and High (resolution) Graphics mode uses the most.

Monitor Ports

Tells Windows to monitor all video operations when the application is running in a specified mode (Text, Low Graphics, or High Graphics).

The application might not display correctly if its display values and the video adaptor's values differ. You should change these options only if the application's display does not appear as it should.

Emulate Text Mode

Increases the rate at which the application displays text.

For most applications, you can leave this option selected. If the application's display gets garbled or the cursor appears in the wrong place, turn off this check box.

Retain Video Memory

Tells Windows not to release the application's extra memory for use by other applications.

Some applications can switch between several different video modes. With such an application, Windows adjusts the application's video memory to accommodate the application's current video mode. This dynamic allocation of video memory works well as long as you do not run out of memory. Selecting this option helps ensure that there will always be enough memory available for the application's display. However, retaining this video memory will result in some memory not being available for other applications even when the memory is not actually in use.

Allow Fast Paste

Allows information to be pasted using a faster method. Because some applications cannot paste properly using this method, you will need to test it by trying to paste information from the Clipboard to the application. If the paste is successful, you can use the option.

Allow Close When Active

Enables Windows to close an application when you exit Windows. This feature lets you exit Windows without having to quit the active application first. If you select this option, you will see a confirmation message about quitting the application when you exit Windows.

If you are uncertain about whether to select this option, do not select the check box.

Reserve Shortcut Keys

Reserves shortcut keys for use by the non-Windows application instead of by Windows. This option applies only when the application is active. When the application is inactive, the shortcut keys have Windows functions.

Application Shortcut Key

Lets you enter a key combination (or shortcut key) that causes the application to become the current application when it is pressed. Shortcut keys must have an ALT or CTRL modifier. SHIFT can also be specified, but it is not allowed by itself.

The shortcut key you specify will work system-wide. This means no other application, including a Windows application, is allowed to use the key combination.

application window

The main window for an application, in this case the PIF Editor window. It contains the application's menu bar and standard mode options.

application window

The main window for an application, in this case the PIF Editor window. It contains the application's menu bar and 386 Enhanced mode options.

application window

The main window for an application, in this case the PIF Editor window. It contains the 386 Enhanced mode advanced options.

application icon Program Manager

Represents a running application. Application icons appear at the bottom of your desktop only after you minimize an application or switch back to Windows from a non-Windows application that is running full screen.

By starting applications and then minimizing them, your desktop is clear for the application you are using, but the others are readily available.

NOTE: Remember, applications that are running take up memory even when running as icons. Double-click an application icon to run the application in a window.

desktop

The background of your screen, on which windows, icons, and dialog boxes appear.

You can use the desktop to start and quit applications, open and close documents, and move windows and icons from one spot to another.

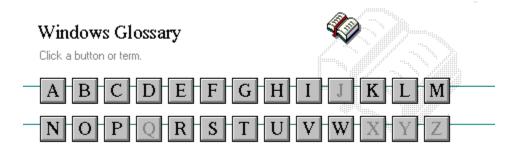
You can change the way your Windows desktop looks and responds by setting the Desktop and Color options in Control Panel.

Double-click anywhere on the desktop to start Task List.

window border

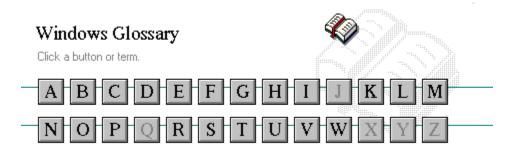
L

The outside edge of a window.
Drag the window border to change the size of the window.

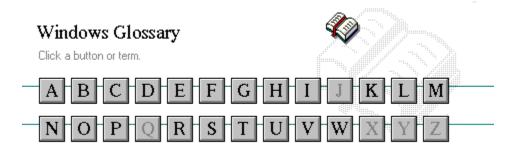




A <u>386 enhanced mode</u> <u>active</u> <u>active printer</u> <u>animation</u> <u>application</u> <u>application icon</u> <u>application window</u> <u>arrow keys</u> <u>associate</u> <u>AUTOEXEC.BAT</u>

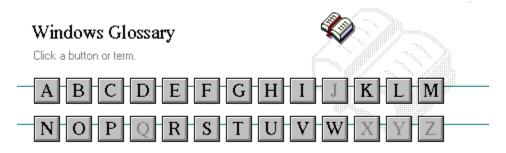


B << button >> button Back button base-level synthesizer batch file baud rate bitmap branch browse byte



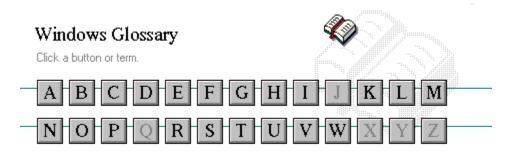
C cascading menu CD-ROM channel check box choose Clipboard close collapse command command button command line

complementary color compound device CONFIG.SYS Contents button Control menu Control-menu box conventional memory cutout

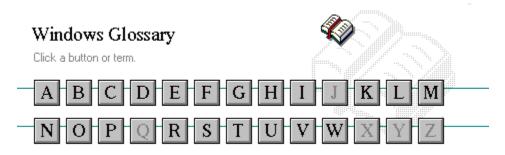


D

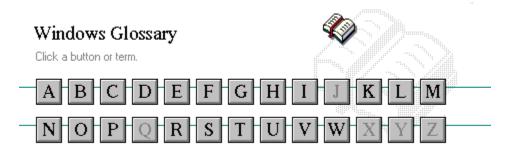
data bits default button default printer desktop desktop pattern destination directory device contention device driver dialog box directory path Directory Tree Directory Tree window directory window disk-drive icon display box document document file document window DOS drag drop-down list box



E error-checking expand expanded memory extended memory extended synthesizer extension



F file file information line flow control font font font size format full-screen application



G General MIDI Mode standard group group icon group window



H <u>History button</u> <u>hotspot</u> <u>hue</u> HyperGuide button bar



I icon insertion point International MIDI Association



J

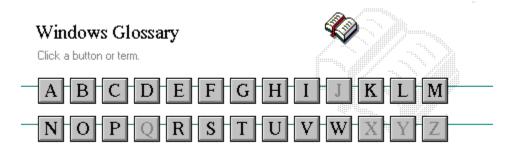
No defined terms.



K keymaps keyword kilobyte



L list box local printer local queue luminosity



M maximize Maximize button Media Control Interface memory menu menu bar menu command menu name menu title MIDI MIDI file

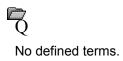
MIDI Mapper MIDI sequencer MIDI Manufacturer's Association (MMA) minimize Minimize button movie file MSCDEX multimedia extensions Multimedia PC multitasking



network printer network queue network server non-Windows application O open option button

P

parity palette patch patchmaps pathname picture elements pixels playlist pointer port print option printer-driver file printer font printer queue information line program file program information file (PIF) program item program item icon



R

RGB components read-only real mode Restore button root directory

S

sample saturation scaled font size screen font screen saver scroll arrow scroll bar scroll bar scroll box Search button select selection cursor serial port shortcut key shrink simple device solid color source directory spin box standard mode status bar stop bits synthesizer

Ŧ

Task List text box text file title title bar topic track

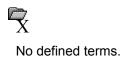


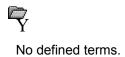


vector font virtual memory volume label



waveform WAVE format wildcard characters window window border Windows application wrap





Z No defined terms.

386 enhanced mode

Provides access to the virtual memory capabilities of the Intel 80386 processor. With virtual memory capabilities, Windows applications can use more memory than is physically available. Enhanced mode also allows for multitasking of non-Windows applications.

active

Describes the selected window or icon that you are currently working with. Windows always applies the next keystroke or command you choose to the active window. If a window is active, it appears in front of all other windows on the desktop, and its title bar changes color to differentiate it visually from other windows. If an icon is made active, its Control menu appears.

Inactive is the opposite of active and describes windows or icons on the desktop that are not selected.

active printer

An installed printer that has been assigned to a printer port using Setup or Control Panel. More than one printer can be set up to work on a single port, but only one can be active, since only one printer can be physically connected to the port at a time.

An inactive printer is an installed printer that is not currently connected to the printer port.

animation

The display of a series of graphic images, simulating motion. You can play animation files (for example, files with the MMM extension) with the Media Player accessory. Animations are also called movies.

application

A computer program used for a particular kind of work, such as word processing. This term is often used interchangeably with "program."

application icon Ala



An icon that represents an application that is running.

application window

The main window for an application. It contains the application's menu bar and main workspace. An application window may contain multiple document windows.

arrow keys

The four arrow keys on your computer keyboard. These keys move the cursor or pointer on your screen to locations you choose. Each arrow key moves the cursor or pointer in the direction of the arrow on the key. Each arrow key is named for the direction in which arrow points: UP ARROW, DOWN ARROW, LEFT ARROW, and RIGHT ARROW.

associate

To assign files that have the same extension to a program. When you choose a file with the specified extension, the associated application runs with the file loaded.

AUTOEXEC.BAT

Batch file that lists MS-DOS commands. MS-DOS automatically carries out the commands in your AUTOEXEC.BAT file when you turn on your computer. The file is located in the root directory of your first hard disk, which is usually drive C.

Typically, an AUTOEXEC.BAT file starts memory-resident utilities such as a network and sets up environment variables that are used later by applications. In addition, your AUTOEXEC.BAT file might set your MS-DOS prompt or start pop-up programs such as Borland's SideKick.

<< button

Displays the previous topic in a series of topics, until you reach the first topic in the series. Then the button is dimmed. Use this button when you want to backtrack through topics the way they are organized in HyperGuide.

>> button

Displays the next topic in a series of topics, until you reach the last topic in the series. Then the button is dimmed. Use this button to move from topic to topic in the recommended order.

Back button



Displays the last topic you viewed. HyperGuide moves back one topic at a time, in the order in which you viewed them.

base-level synthesizer

One of the two types of synthesizers accommodated by Windows.

MIDI files authored for Windows include two versions of a song: one version for base-level synthesizers and another version for extended synthesizers. The distinctions between base-level and extended synthesizers are based on the number of instruments and notes the synthesizer can play.

batch file

A file that runs a sequence, or "batch," of commands when you type its filename. All filenames of batch files end with the extension .BAT, even though you don't have to type this extension to run the batch file.

baud rate

Signalling speed measured by the number of signals per second.

An image stored as an array of bits.

bitmap

branch CETTERS

A segment of the Directory Tree, representing a directory and any subdirectories it contains.

browse

To look through files and directories. In some dialog boxes, the Browse button shows a list of files and directories from which you can choose.

byte

The amount of memory space (normally 8 bits) that a computer needs to represent a single character or word.

cascading menu

<u>scrol</u>l

A menu that opens from a command on another menu.

CD-ROM

Compact Disc-Read Only Memory. An optical data-storage technology that allows large quantities of data (such as animations, images, music, and sound) to be stored on a compact disc similar to discs used by the music industry.

channel

MIDI uses channels to send messages to individual devices within a MIDI setup. There are 16 MIDI channel numbers. Devices in a MIDI setup can be directed to respond only to messages marked with a channel number specific to the device.

check box

 \boxtimes

A small square box that appears in dialog boxes and can be selected or cleared. When the check box is selected, an X appears in the box.

choose

To use key combinations or your mouse to carry out a command in Windows. You often choose a command after you have selected an item or made it active.

Clipboard



A temporary storage area in memory, used to transfer information. You can cut or copy information onto the Clipboard and then paste it into another document or application.

close

To reduce a document window or application window to an icon or, in some cases, to remove it from the desktop. You close a window by double-clicking the Control-menu box or choosing the Close command from the Control menu. When closing an application window, you can choose to save or abandon changes to the current document before you close it.

collapse

To hide a level of directory information in the Directory Tree window. When you first start File Manager, all directories but the root directory are collapsed.

Selend

command

A word or phrase, usually found in a menu, that you choose to carry out an action.

command button



A button in a dialog box that carries out or cancels the selected action. Two common command buttons are OK and Cancel. The button that carries out the action will often have a label that describes it (for example, Open, Create, Install). Another dialog box appears when you choose a command followed by ellipses.

command line

Information given to MS-DOS that specifies a command and all the pertinent information to carry it out. For example, to start Windows, you type **win** at the MS-DOS prompt.

complementary color

The color exactly opposite a color on the RGB color wheel. For example, the complementary color of blue is yellow.

compound device

Devices, such as the waveform audio driver, that have an associated file and require a filename specification when opened.

CONFIG.SYS

A file that defines device drivers and specifies your MS-DOS configuration. For example, a typical CONFIG.SYS file might specify the location of the MS-DOS file COMMAND.COM, define an extended memory manager, and specify how many files an application can have open at once. MS-DOS runs the commands in the CONFIG.SYS file each time you turn on your computer. Your CONFIG.SYS file is located in the root directory of your first hard disk, which is usually drive C.

<u>C</u>ontents

Displays the HyperGuide contents.

Contents button

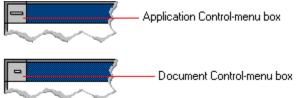
Control menu

The menu in the upper-left corner of a window. The Control menu appears on every application that runs in a window and on some non-Windows applications. Document windows, icons, and some dialog boxes also have Control menus.

Control menu commands move, change the size of, and close windows. You can also switch to Task List by using the Control menu. For non-Windows applications, Control menu commands transfer information and perform other functions, depending on the application.

Control-menu box

The box located in the upper-left corner of a window. Clicking the Control-menu box opens the Control menu for the window.



conventional memory

The first 640K of memory that MS-DOS uses to run applications. Most computers have at least 256K of conventional memory and can accommodate up to 640K of conventional memory.



A portion of a Paintbrush drawing you select with the Scissors or Pick tool.

data bits

The bits in each package of data sent between two computers during telecommunication. Most characters are transmitted in 7 or 8 data bits.

default button



The command button in some dialog boxes that is automatically selected or chosen by Windows as the most logical or safest choice. The default button has a bold border, indicating that it will be chosen if you press ENTER. You can override a default button by choosing Cancel or another command button.

default printer

The printer that Windows applications automatically use when you choose the Print command. You can have only one default printer, which must also be the active printer on the port. The printer you use most often should be made the default printer.

desktop

The background of your screen, on which windows, icons, and dialog boxes appear.

desktop pattern

A geometric pattern that appears across your desktop. You can design your own pattern or choose one of the patterns provided by Windows.

destination directory

The directory to which you intend to copy or move one or more files.

device contention

When several applications simultaneously request use of a peripheral device, such as a printer or modem.

Windows automatically handles device contention when all the applications are Windows applications. When one of the applications is a non-Windows application, however, the conflict is handled according to the options you select in the 386 Enhanced dialog box. This dialog box appears when you choose the 386 Enhanced icon in Control Panel.

device driver

Tells Windows how to control a piece of hardware. Using Control Panel, you can install device drivers for your:

- Display (monitor) Keyboard Mouse
- - Network

dialog box

A rectangular box that either requests or provides information. Many dialog boxes present options that you must choose from before Windows can carry out a command. Some dialog boxes present warnings or explain why a command can't be completed.

No. of Lot, No. 1 - Directory path directory path

The directions to a directory or file within your system.

In the illustration, C:\ART stands for the ART directory on drive C. Any commands you use affect the files and subdirectories in this directory.

When you want to specify a file, make sure the filename follows the directory path.





A graphic display of a disk's directory structure. The directories on the disk are shown as branching from the disk's root directory.

Directory Tree window

Le WORDS

A File Manager window that shows the complete branching structure of the selected disk drive.

directory window



A File Manager window that lists the contents of a specific directory. The directory window shows all the files and subdirectories contained in the directory.

disk-drive icon

An icon in the Directory Tree window of File Manager that represents a disk drive on your system. Different icons depict floppy disk drives, hard disk drives, RAM drives, CD-ROM drives, and network disk drives.

display box

A display box is not an option, but a type of text box that shows an example of another option you have selected, in this case a sample of the 10 pt, underlined, Helvetica font.

document

Whatever you create with an application, including information you enter, edit, view, or save. A document can be a business report, a spreadsheet, a picture, and so on.

document file



Files that are associated with an application. You can start an application and open the associated file by choosing a document file icon.

document window

a sample document.

A window inside an application window. Each document window contains a single document or other data file. There can be more than one document window inside an application window.

DOS

Disk Operating System, typically known as MS-DOS (Microsoft) or PC-DOS (IBM). This is the underlying software that must exist for your PC to operate.

drag

A mouse move. You drag a Windows element by pointing to it, holding down the mouse button, and sliding the mouse from one spot on the surface of your desk to another and releasing the mouse button.

drop-down list box

A list box that opens and closes in dialog boxes.

Before you open a drop-down list box, it looks like this:

International



After the list box is open, it looks like this:

International	
Vinited States	💽 —— When you click this arrow
) Sweden	the box closes.
Switzerland (French)	
Switzerland (German)	
🐛 Switzerland (Italian)	12
ζ Taiwan	2
🖉 United Kingdom	
United States	_ /
Other Country	• <
Som.	\sim

NOTE: When the list is longer than the box, scroll bars are provided.

error checking

A method for validating transmissions.

expand

To show hidden directory levels in the Directory Tree. With File Manager, you can expand a single directory level, one branch of the Directory Tree, or all branches at once.

expanded memory

Memory in addition to conventional memory that is available to applications. It is allocated in 16K blocks. Windows makes use of expanded memory only if the /r switch is used at startup. Windows running in 386 enhanced mode simulates expanded memory for the applications that need it. Windows running in standard mode or 386 enhanced mode allows applications to use expanded memory, but does not use expanded memory itself in managing applications.

extended memory

Memory in addition to conventional memory that is not readily accessible to MS-DOS or MS-DOS applications. Extended memory cannot be used on 8086 and 8088 computers. Windows running in standard mode or 386 enhanced mode uses extended memory to manage and run applications.

extended synthesizer

One of the two types of synthesizers accommodated by Windows.

MIDI files authored for Windows include two versions of a song: one version for base-level synthesizers and another version for extended synthesizers. The distinctions between base-level and extended synthesizers are based on the number of instruments and notes the synthesizer can play.

extension

Part of a file or directory name that appears after a period and provides additional information. It usually indicates the type of file or directory. For example, program files have default extensions of .COM or .EXE .

Many applications include a default extension automatically when you save a file the first time. For example, Notepad adds a .TXT extension to all filenames unless you specify otherwise.

file

A document or application that has been given a name. All documents are stored as files in Wiindows.

file information line Urite - REPORT.TXT 12% of 101K 12:08 AM 2-6-91

Information specific to each file in a print queue. The information can include these details:

The file's position in the queue or a printer icon if the file is printing.

The title of the print job assigned by the application (if your network software supports this).

What percentage of the file has printed so far.

The size of the file in kilobytes (if the Print File Size command on the View menu is selected).

The time and date you sent the file to Print Manager (if the Time/Date Sent command on the View menu is selected).

If you are connected to a network printer, the printer queue information line shows the network server connection. Any detailed information the network can provide appears in the message box at the upper-right corner of the Print Manager window. Networks can provide varying degrees of detailed information.

flow control

The method for controlling the flow of information.

font Water Water Water Water

A graphic design applied to all numerals, symbols, and characters in the alphabet. A font usually comes in different sizes and provides different styles, such as bold, italic, and underlining for emphasizing text.

font size

The height of a printed character, measured in points. One inch equals 72 points. For example, 12-point Helv is 12 points high.

Helv

Helv 8 ABCDEFGHIJKL Helv 10 ABCDEFGHIJKL Helv 12 ABCDEFGHIJKL

Helv 14 ABCDEFGHIJKL

The font and font size you use determine the amount of text that fits on one page.

format

(1) The appearance of text on the pages of a document. (2) To prepare a disk so it can hold information. Formatting a disk erases all information that was previously on it.

full-screen application

A non-Windows application that uses the entire screen--rather than a window--to run in the Windows environment.

General MIDI Mode standard

A MIDI specification controlled by the MIDI Manufacturers Association (MMA). The purpose of this specification is to enable MIDI file authors to create files that sound the same across a variety of different synthesizers.

group

A collection of applications within Program Manager. Grouping your applications makes them easier to find.

group icon

A group window you have reduced to an icon in Program Manager.

group window

A window that displays the items in a group within Program Manager. These items can be applications, files associated with applications, or a combination of both.

History button

His<u>t</u>ory

Displays a list of the HyperGuide topics you have viewed. Use this button to revisit any of the last 40 HyperGuide topics you have viewed. The most recent topic appears first.

hotspot

Text, graphics, or parts of graphics that provide links to other HyperGuide topics or more information about the current topic.

Whether text or graphics, the pointer changes to the shape of a hand whenever it is over a hotspot. If you click a hotspot that is linked to another topic, that topic will appear in the HyperGuide window. If the hotspot is linked to more information, HyperGuide displays the information in a popup window on top of the HyperGuide window.

hue

The position of a color along the color spectrum.

HyperGuide button bar

<u>C</u>ontents <u>S</u>earch <u>B</u>ack His<u>t</u>ory <u>U</u>p <u>K</u> <u>></u>

Contains the HyperGuide buttons you use to move among topics and contents screens. It is located near the top of the HyperGuide window.

icon



A graphic representation of a disk drive, directory, group, application, document, and so on. You can restore an application icon to a window when you want to use the application.

insertion point

The place where text will be inserted when you type. The insertion point usually appears as a flashing vertical bar in an application's window or in a dialog box. The text you type appears to the left of the insertion point, which moves to the right as you type.

International MIDI Association (IMA)

The non-profit MIDI organization that circulates information about the MIDI specification.

keymaps

Percussion instruments are key-based--each note plays a different percussion instrument. Keymaps translate MIDI key values to ensure the proper percussion instruments are used to play MIDI files. All MIDI files for Windows are authored using standard key assignments based on the General MIDI Mode standard.

keyword

Words in the HyperGuide Search dialog box that are associated with topics. Each application's documentation has its own keyword list, including the glossary words in HyperGuide. You select from the list of keywords or type a keyword to see the list of topics associated with that keyword.

kilobyte

The measurement used for the size of a computer's memory, where 1 kilobyte (K) = 1,024 bytes.

list box sysini.txt

A box within a dialog box that lists available choices--for example, the list of all available files in a directory. If all the choices don't fit in the box, there will be a vertical scroll bar to the right of the list box. In some list boxes, you can select more than one item.

local printer

A printer that is directly connected to your printer by a cable.

local queue

2 Calendar - SCHEDULE, CAL 6K 12:10 AM 2-6-91

Lists the files that you directed to any active printer connected to your computer. The computer and printers are connected locally by a cable.

When Print Manager starts printing on a local printer, its icon appears at the bottom of your screen. If you restore the icon to a window, you see the print queue for any active printer connected to your computer. You can use the Print Manager window to check the status of files in the print queue or to interrupt or cancel a print job.

luminosity

The brightness of the color on a scale from black to white.

maximize

To enlarge a window to its maximum size by using the Maximize button or the Maximize command.

Maximize button



The small button at the upper-right corner of a window that contains an Up arrow. Mouse users can click the Maximize button to enlarge a window to its maximum size. Keyboard users can use the Maximize command on the Control menu.

Media Control Interface (MCI)

A standard control interface for multimedia devices and files. MCI allows a multimedia application to easily control a variety of multimedia devices and files.

memory

The space in a computer where information is stored while you are working with it. Most PCs have a small amount of read-only memory (ROM), containing the built-in programs that start the operation of the computer when it is turned on, and a large amount of random-access memory (RAM) for users' programs and data.

menu √<u>M</u>inimize on Use

A list of available commands in an application window. Menu names appear in the menu bar near the top of the window. The Control menu, represented by the Control-menu box at the left end of the title bar, is common to all Windows applications. You use a command on a menu by selecting the menu name, then choosing the command you want.

menu bar <u>File Options W</u>indow <u>H</u>elp

The horizontal bar containing the names of an application's menus. It appears just under the title bar.

Past

menu command

A word or phrase in a menu that you choose to carry out an action, such as copying a file.

menu name

The name for a particular menu that appears in the menu bar and opens a menu when you choose it.

menu title

A word or phrase in the menu bar that identifies a group of commands. Selecting the menu title causes the title to be highlighted and its menu of commands to appear below it.

MIDI

Musical Instrument Digital Interface. MIDI sets a communications standard for transferring data between musical instruments and associated devices.

MIDI file

A file format for storing MIDI songs. In Windows, MIDI files have a .MID filename extension.

MIDI Mapper

A Control Panel option that lets you create and edit MIDI setup maps. Windows uses these maps to translate and redirect MIDI data.

MIDI Sequencer

Software that creates or plays songs stored as MIDI files. When a sequencer plays MIDI files, it sends MIDI data from the file to a MIDI synthesizer that produces the sounds. Windows provides a MIDI sequencer to play MIDI files.

MIDI Manufacturer's Association (MMA)

A collective organization composed of MIDI instrument manufacturers and MIDI software companies. The MMA works with the MIDI Standards Committee to maintain the MIDI specification.

minimize

To reduce a window to an icon using the Minimize button or the Minimize command. The document or application remains open (or running), and can be the active application or document.

Minimize button



The small button at the upper-right corner of a window that contains a Down arrow. Mouse users can click the Minimize button to reduce a window to an icon. Keyboard users can use the Minimize command on the Control menu.

movie file

A multimedia data file (for example, a file with the .MMM extension). You can play movie files with the Media Player accessory. Movie files are also called animations.

MSCDEX

Microsoft Compact Disc Extensions. MSCDEX is software that makes CD-ROM drives appear to DOS as network drives. You must have MSCDEX installed on your computer for the CD-ROM drive to work.

multimedia extensions

Additional features added to Windows version 3.0 that enable your computer to run animations, play sound and MIDI files, and display high-quality images.

Multimedia PC

Multimedia personal computer. A multimedia computer satisfies a minimum set of hardware/software requirements necessary for multimedia computing. The requirements include:

- An 80286/386/486 microprocessor running at 10MHz or faster
- 2MB or more of RAM
- 30MB or larger hard disk
- VGA display
 - A digital audio subsystem
 - A CD-ROM drive
 - Systems software compatible with Microsoft Windows version 3.0 with multimedia extensions

multitasking

The ability of a single computer to perform several tasks simultaneously.

Multitasking makes it possible to print one document while editing another, or to perform lengthy computations while you work on something else.

network printer

A printer that is accessible to your computer only through a network.

network queue

Lists the files on the network server if you are using a network printer.

network server

A computer on a network that provides a particular service to other computers. For example, a disk server manages a large file server, and a print server manages a printer.

non-Windows application

An application that was not designed to run in Windows. Generally, non-Windows applications do not conform to Windows user-interface standards.

open

To display the contents of a directory or file in a window, or to enlarge an icon to a window.

option button

۲

A small round button that appears in a dialog box and is used to select an option. Within a group of related option buttons, you can select only one button.

palette

Defines the colors used in a bitmap image. Every device independent bitmap (DIB) has an associated color palette.

parity

The method of detecting errors in data transmission.

patch

A specific sound created by a synthesizer. A synthesizer plays notes using sounds defined as patches.

patchmaps

A patch is a specific sound created by a synthesizer. A synthesizer plays notes using sounds defined as patches. Patchmaps translate MIDI patch changes to ensure the proper instruments are used to play MIDI files. All MIDI files for Windows are authored using standard patch assignments based on the General MIDI Mode standard.

pathname

The directions to a directory or file within your system. For example, C:\WINDOWS3\APPTS\JUNE.CAL is the pathname of the JUNE.CAL file in the APPTS subdirectory in the WINDOWS3 directory on drive C.

picture elements

The smallest graphics unit on the screen. Also known as pels.

pixels

The smallest graphic units on the screen. Also known as picture elements (pels).

playlist

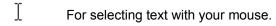
A list of compact disc titles and tracks that determines the order in which the tracks on the disc are played. Playlists are only used in Music Box.

Use the Program button to assign or edit titles, and to change the playlist.

pointer 😽

In Windows, the shape of the pointer indicates its function.

- For selecting Windows items, scrolling, resizing windows, and moving windows and dialog boxes with your mouse. This is the pointer you will see most often.
- For choosing a HyperGuide hotspot.



- \Leftrightarrow For changing the size of a window with your mouse.
- For changing the location or size of a window with your keyboard.

 $\overline{\mathbb{Z}}$

For indicating the application is processing your request.

port

A connection on a computer where you plug in a cable that carries data to a device.

LPT ports are parallel ports. COM ports are serial ports. EPT is a port used for certain printers, such as the IBM Personal Pageprinter. You can use the EPT port only if you have installed a special card in your computer.

Multimedia PCs also have a port for a MIDI sequencer.

print options

Printer-specific settings such as page orientation--portrait or landscape--or the manner in which paper feeds through the printer. These options vary from printer to printer.

printer-driver file

A file that gives Windows important information about how to control your printer, including details about printer features and the printing interface, descriptions of fonts (such as sizes and styles), character translations, and control sequences the printer uses to achieve various formats. Windows has printer-driver files for most commonly used printers.

printer font

A series of dots connected by lines that can be scaled to different sizes. Another name for printer fonts is vector (or stroke) fonts. Plotters typically use vector fonts.

printer queue information line

PCL/HP LaserJet on LPT1 [Printing]

Indicates the following:



The name of the printer. Where the printer connects to your computer. The current status of the printer.

program file



A file that contains information that controls an application. In File Manager, each program file is represented by an icon. You can start the application by choosing the icon. Filenames for program files can have these extensions: .EXE, .COM, .PIF, and .BAT.

program information file (PIF)

A file that provides important information that Windows needs to run a non-Windows application. PIFs contain information such as the name of the file, a startup directory, whether the program writes directly to the screen or to memory, and multitasking options for applications running in 386 enhanced mode.

program item



A program file or associated document represented by an icon in Program Manager. The program item provides the instructions Windows needs to start an application and open a document (if specified) when you choose the icon.



program item icon

An icon representing an application you can start or an associated document you can open from a group in Program Manager. The program item provides the instructions Windows needs to start an application and open a document (if specified) when you choose the icon.

RGB components

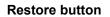
The amount of each of the three primary colors--red, green, and blue--present in a color. Every color and pattern is made by varying the three primary colors. This is true even in monochrome (black and white) mode. For instance, white is made by mixing together 255 parts of red, 255 parts of green, and 255 parts of blue. Black, on the other hand, is 0 red, 0 green, and 0 blue.

read-only

Describes a file or CD-ROM disc that can only be opened and read. You cannot edit a read-only file or CD-ROM disc and save your changes.

real mode

An operating mode that Windows runs in to provide maximum compatibility with versions of Windows applications released prior to Windows version 3.0. Real mode is the only mode available for computers with less than 1 MB of extended memory.





The small button at the upper-right corner of a window that contains both an Up arrow and a Down arrow. The Restore button appears only after you have enlarged a window to its maximum size. Mouse users can click the Restore button to return the window to its previous size. Keyboard users can use the Restore command on the Control menu.

root directory

The main directory on a disk. The root directory is created at the first level when you format a disk. The symbol used to indicate the root directory of a disk is the backslash (\). For example, the root directory for drive C is noted as C:\.

sample

A piece of waveform data represented by a single numerical value. You convert sound into digital form by taking samples of the sound at specific time intervals and converting them to numeric values.

saturation

The purity of a hue, moving from gray to the pure color.

scaled font size

A font size that approximates a specified font size for use on the screen. Windows scales larger font sizes when a size that is available for the printer is not available for the screen. Scaled fonts may look slightly different from unscaled fonts. When you choose a smaller font size that is available for the printer but not for the screen, Windows substitutes the correct size from a precision-drawn font that resembles the selected font as closely as possible.

screen font

A font that duplicates a printer font on your screen.



If you choose a printer font that does not have a corresponding screen font, Windows substitutes a screen font that closely resembles the printer font. The substitute font duplicates the line lengths and page breaks of the font you selected.

When you purchase extra fonts from a printer or font manufacturer, ask about the availability of screen fonts to match.

screen saver

An image or pattern that is shown on your computer screen during periods of inactivity. Screen savers hide information currently on the screen; by changing patterns they can also save wear on the electronics in the display.

scroll arrow



An arrow on either end of a scroll bar that is used to scroll through the contents of a window or list box. Clicking a scroll arrow moves the contents one line. Holding down a scroll arrow scrolls the contents continuously.

Scroll arrows also control the playing of media in some applications, such as Media Player and Sound Recorder.

scroll bar	+	+
scroll bar	· · · · · · · · · · · · · · · · · · ·	

A bar that appears at the right and/or bottom edge of a window whose contents aren't completely visible. Each scroll bar contains two scroll arrows and a scroll box, which allow you to scroll within the window or list box.

A scroll bar is also used to control playing of media in some applications, such as Media Player and Sound Recorder.

scroll box



The square or rectangular box within a scroll bar that indicates your relative position within a document or list box. Mouse users can drag the scroll box up or down quickly through long documents.

A scroll box is also used to control playing of media in some applications, such as Media Player and Sound Recorder.

Search button



Displays the keywords you can use to search for topics. Use this button to look for topics related to a keyword.

select

To mark an item by highlighting it with key combinations or with a mouse. Selecting does not initiate an action. After selecting an item, you choose the action that affects or involves the item. For example, you can select text and then choose the Copy command to copy the text onto the Clipboard.

selection cursor



The marking device that shows where you are in a window, menu, or dialog box and what you have selected. The selection cursor appears as a dotted box around the text in a dialog box option.

serial ports

Ports used by your system, named COM1, COM2, and so on. Serial ports are typically used for connecting modems, mouse devices, and some kinds of printers.





A key or key combination, available for some commands, that you can press to carry out a command without first selecting a menu. The shortcut key for a command is listed to the right of the command name on the menu.

shrink

To reduce a window to an icon using the Minimize button or the Minimize command. The document or application remains open (or running), and can be the active application or document.

simple device

Devices, such as audio compact-disc players, that don't have an associated file and can be opened without a filename specification.

solid color

A color directly supported by your display.

source directory

The directory containing the file or files you intend to copy or move.

spin box



A spin box shows one item in a range of possible choices. Clicking the Up or Down arrow to the right of the entry lets you "spin" through the available choices until your choice appears in the display rectangle.

standard mode

The normal operating mode for running Windows. This mode provides access to extended memory. In standard mode, you can also switch among non-Windows applications.

status bar

A line of information located at the top or bottom of a window. For example, in a directory window the status bar tells how many files are selected, how much disk space they occupy, and the total number of files in the directory. In the Directory Tree window, the status bar shows the number of bytes available on the disk and the total disk capacity. Not all windows have a status bar.

stop bits

The timing unit between characters.

Stop bits are not actually bits; they determine the time between transmitted characters.

synthesizer

An electronic instrument able to make music and sounds by creating its own audio waveforms and sending them out to an audio system. A synthesizer can play back MIDI files.

Task List

A window that shows all the applications you have running so you can switch among them. You can open the Task List window by choosing Switch To from the Control Menu or by pressing CTRL+ESC.

text box



A box within a dialog box where you type the information needed to carry out a command. When the dialog box appears, the text box may be blank or may contain text.

text file

A file containing only plain text, numbers or symbols. The text in a text file is uniform and does not contain any formatting, such as bold, underline, or different fonts and font sizes. A text file usually consists of characters coded from the ASCII character set.

The advantage of a text file is that it can be transferred to almost any text editor or word processor. Also, MS-DOS and Windows use text files, such as AUTOEXEC.BAT, CONFIG.SYS, and WIN.INI.

title

Another name for a software application written to run on a Multimedia PC.

----Ľ title bar

The horizontal bar at the top of a window that contains the title of the window or dialog box. On many windows, the title bar also contains the Control-menu box and Maximize and Minimize buttons.

topic

The level in the HyperGuide hierarchy at which you see information in the main window. This information can be in the form of a Quick Look graphic, an explanation of a command, a conceptual overview, a procedure, or a table of keys. Information in pop-up windows and contents screens are not considered topics.

track

A sequence of sound on a CD disc, which usually corresponds to a song.

Up button



Moves up one level in the HyperGuide hierarchy.

vector fonts

A series of dots connected by lines that can be scaled to different sizes.

virtual memory

A memory management system used by Windows running in 386 enhanced mode, which allows Windows to behave as if there were more memory than is actually present in the system. Virtual memory equals the amount of free RAM plus the amount of disk space allocated to a swap file that Windows uses to simulate additional RAM.

 $\sim \sim$ -Volume label volume label

The name you give a disk by using the Label command. Disk labels are optional. You see this information in File Manager only if you assigned a label to your disk. You can change or add a disk label through File Manager.

WAVE format

Microsoft's format for digitized waveform files. These files have a .WAV extension.

waveform

A sound waveform displays variances in air pressure over time. An audio signal waveform displays variances in voltage over time.

wildcard characters

Two MS-DOS characters you can substitute for all or part of a file or directory name when you want to find similarly-named files or want one command to affect a number of files or directories.

An asterisk (*) substitutes for all characters. A question mark (?) substitutes for a single character.

For example, this entry covers all files with a .DOC extension in the current directory:

*.DOC

And this entry covers everything named with FY, three other characters, and the extension .90:

FY???.90

window

A rectangular area on your screen in which you view an application or document. You can open, close, and move windows, and change the size of most windows. You can open several windows on the desktop at the same time and you can shrink windows to icons or enlarge them to fill the entire desktop.

window border



The outside edge of a window. You can lengthen or shorten each border. You can also change the width of the border with Control Panel's Desktop command.

Windows application

An application that was designed for Windows and will not run without Windows. All Windows applications follow the same conventions for arrangement of menus, style of dialog boxes, use of the keyboard and mouse, and so on.

wrap

The automatic movement of the insertion point from the end of one line to the beginning of the next line as you type. When text wraps, you do not need to press ENTER at the end of each line in a paragraph.