



Click a menu name or command.	To all the second secon

<u>R</u> estore
Move
<u>S</u> ize
Mi <u>n</u> imize
Ma <u>x</u> imize
<u>C</u> lose
S <u>w</u> itch To

Restore Command



Restores the window to its former size after it has been enlarged (by using the Maximize command) or reduced to an icon (by using the Minimize command).

Move Command



Moves a window to another location on the desktop when you press the ARROW keys.

Size Command



Changes the size of a window when you press the ARROW keys.

Minimize Command



Reduces a window to an icon.

Maximize Command



Enlarges a window to its maximum size.

Close Command



Closes a window.

Switch To Command



Starts Task List, with which you can switch among running applications and rearrange their windows and icons on your desktop.

Click a folder or topic title. Or to read in the recommended order click the >> button.

What's Included with Windows?	
The Windows Environment	
The Parts of a Window	
How Windows Works	
Windows Memory and Modes	
Windows and Your Applications	

For Owners of Previous Versions of Windows

Click a folder or topic title. Or to read in the recommended order click the >> button.

What's Included with Windows?

What's Included with Windows?

<u>Main Group</u>

Accessories Group

<u>Games Group</u>

- The Windows Environment
- Parts of a Window
- E lcons
- How Windows Works
- Windows Memory and Modes
- + Windows and Your Applications
- For Owners of Previous Versions of Windows

Click a folder or topic title. Or to read in the recommended order click the >> button.

+ -What's Included with Windows? \frown ——The Windows Environment

Elements of Windows The Desktop The Windows

Application Windows

Document Windows -Parts of a Window

+ (+)

-lcons **-**

-How Windows Works + -Windows Memory and Modes

+ -Windows and Your Applications

+ -For Owners of Previous Versions of Windows

Click a folder or topic title. Or to read in the recommended order click the >> button.

+	-What's Included with Windows?
<u>-</u>	The Windows Environment
\square	-Parts of a Window

	Control-Menu Box	Menus	
	<u>Title Bar</u>	Dialog Boxes	
	Minimize Button	Workspace	
	Maximize Button	Scroll Bar	
	Restore Button	Borders	
_	<u>Menu Bar</u>		
+	<u>—Icons</u>		
<u>-</u>	-How Windows Works		
+	——Windows Memory and Modes		
+	Windows and Your Applications		
+	-For Owners of Previous	Versions of Windows	

Click a folder or topic title. Or to read in the recommended order click the >> button.

+ -What's Included with Windows?

- **+** -The Windows Environment
- + -Parts of a Window
 - -lcons

<u>lcons</u>

+

Program Item Icons

Application Icons

- -Windows Memory and Modes +
- -Windows and Your Applications
- **+** -For Owners of Previous Versions of Windows

Click a folder or topic title. Or to read in the recommended order click the >> button.

What's Included with Windows?
The Windows Environment
Parts of a Window
E Icons
How Windows Works

 What Microsoft Windows Can Do

 How Windows Helps You Organize

 How to Switch Among Applications

 How to Transfer Information

 How to Work with Several Documents

 Automatic Updates Between Documents

 The Mouse, The Keyboard, or Both

 Windows Memory and Modes

Windows Memory and Modes
 Windows and Your Applications

For Owners of Previous Versions of Windows

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<u>(+)</u>	-The Windows Environm	nent
<u>(+)</u>	—Parts of a Window	
<u>(+)</u>	<u>—Icons</u>	
<u>+</u>		
+		<u>Modes</u>
	How Windows Uses Memory	Real Mode
	Conventional Memory	Standard Mode
	Extended Memory	386 Enhanced Mode
	Expanded Memory	What Mode to Use
	Windows Modes	How to Use Expanded Memory in Real Mode
<u>-</u>		lications
<u>+</u>	-For Owners of Previous	S Versions of Windows

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+		/indows?
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+	—Parts of a Window	
<u>-</u>	—Icons	
+	-How Windows Works	
+		Modes
+		lications
	About Applications	<u>Utilities</u>
	Windows 3.0 Applications	Pop-up Programs
	Windows 2.x Applications	Options for Starting Windows
	Non-Windows Applications	How to Start an Application with Windows
F n	Memory-Resident Applications	Versions of Windows

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What's Included with Windows?	
The Windows Environment	
Parts of a Window	
E lcons	
How Windows Works	
Windows Memory and Modes	
Windows and Your Applications	
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For Owners of Previous Versions of Windows

<u>New Features of of Windows 3.0</u> If You Have a Previous Version of Windows

What's Included with Windows?

In addition to providing a graphical operating environment, Windows 3.0 includes 18 <u>applications</u>. The <u>program item icons</u> you can use to start them are located in these three Program Manager <u>groups</u>:



Concepts

Accessories Group Games Group Main Group

program item icon

Starts an application when you double-click it.

Main group

Contains applications that help you organize your applications and files, start your applications, and adjust the way Windows looks and behaves. This is the group you see open on the desktop when you first start Windows.

Accessories group

Contains applications that provide tools you can use to conduct home or office business. This group also includes PIF Editor, a special program for controlling how non-Windows applications run in Windows.

Games group

Contains applications that are for fun, but they also give you an opportunity to practice some of the skills you need to operate Windows, especially mouse skills.

Main Group

The applications represented in the Main group give you control over how Windows looks and operates. With them, you can start applications, modify and configure Windows, and organize your applications and documents.



File Manager



File Manager helps you organize and manage all the files and directories stored on your disks. You can also start applications and load documents from File Manager.

Control Panel

With Control Panel, you can change colors and fonts, set up printers and modems, connect to and disconnect from networks, change the appearance of your desktop, set up sound effects, change display modes, and control MIDI file playback.



Print Manager



to your printer from Windows and non-Windows applications to your printer. The Clipboard acts as temporary storage for information

Print Manager keeps track of all print requests you send



DOS Promot



With Setup, you can add hardware and software to your Windows environment and modify information about Windows Setup some current settings.



README.TXT is a text file containing documentation written after HyperGuide was produced and information reserved for advanced users. You can use Notepad to read README.TXT.



HyperGuide is your online documentation for learning how to use Windows. HyperGuide provides a comprehensive description of Windows, including explanations and procedures for first-time users.

CAUTION: Do not run CHKDSK /f from the Windows DOS Prompt, or any other commands that modify file allocation tables. Quit Windows first; then use the command from MS-DOS.

you want to move or copy from one document to another.

With DOS Prompt, you can type MS-DOS commands just as you would if you were not running Windows.

Accessories Group

With the <u>applications</u> represented in the Accessories group, you can get started working in Windows right away. Included are three full-featured applications and several other programs that add business conveniences to your Windows desktop.



Write is a graphical word processor. With it you can create and print documents.

Paintbrush

Paintbrush is a drawing tool you can use to create simple or elaborate color drawings that include text. If you have a color printer, you can print your work in color.



Terminal is a communications tool that can connect your computer to other computers.



Notepad is a simple text editor for jotting down notes and short memos. It is also a handy tool for editing and creating batch files.



Recorder is an efficiency tool for recording the keystroke and mouse sequences you use most often. Instead of repeating them manually, Recorder can play them back whenever you need them.



Cardfile is like a set of index cards you can use to record names, addresses, phone numbers, directions, or any other brief information you want easy access to.



Calendar combines a month-at-a-glance calendar and a daily appointment book.



Calculator includes a standard view and a scientific view.



Alarm Clock keeps track of the time as you work and includes an alarm with optional sound effects.

PIF Editor





With Media Player, you can play multimedia files, such as recorded sounds and music, MIDI files, animation, and so on.

With Sound Recorder, you can play, record, and edit sound files. You can also mix sounds and add sound

effects to a file.





Music Box plays your audio compact discs. You can program a playlist, select songs you want to hear, and







move to any track on the disc.

Games Group

The two games you received with Windows serve you twice. They will entertain you and provide an opportunity to practice the skills you need to operate Windows.



Solitaire is a universally popular card game that you play alone.

Reversi is a game of strategy and second-guessing that pits you against the originator of the program.

Elements of Windows

The Windows graphical environment is easy to use because it's intuitive, and basic elements work the same across all Windows applications.



desktop

The screen background.

windows

Contain applications you've started and documents you're working on.

program item icon

Represents an application or document you can start from a Program Manager group.

menu

Contains the commands you can choose to tell applications what to do.

dialog box

Appears when Windows needs more information before carrying out a command you've chosen.

application icon

Appears when you minimize an application or a document window.
Procedures

Displaying Custom Wallpaper Moving Windows, Icons, or Dialog Boxes Selecting Existing Desktop Patterns Starting Applications

The Desktop

The Windows desktop is your work surface. On it, you can:

- Start and quit applications.
- Open and close documents. Move windows and icons from one spot to another.

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



+ Related Procedures

desktop

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

You can change the desktop by choosing from sample color schemes or create your own in Control Panel.

You can add more interest to the desktop surface by choosing (or creating) a two-color pattern or a multi-color bitmap like the one in the illustration. Using other options, you can also set the spacing for an invisible sizing grid that changes the spacing between icons.

Procedures

Changing the Grid Changing the Spacing Between Icons Creating New Desktop Patterns Displaying Custom Wallpaper Selecting Existing Desktop Patterns

The Windows

In the Windows environment, you'll work in two types of windows: application windows and document windows.



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.

document window

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.

title bar

Tells you the name of the application or document. The color or intensity of the title bar of the active window is usually different from that of the inactive window.

workspace

Area in a window where your work appears.

scroll bars

Bars that let you use your mouse to view parts of a document that are not visible in a window.

window border

Outside edge of a window. You can use your mouse to resize windows by dragging their borders.

Concepts

Application Windows Document Windows

Procedure Changing a Window's Size

Application Windows

When you start a <u>Windows application</u>, it opens in an application window like this:

Hicrosoft Word	-
File Edit View Insert Format	Utilities
Macro Window	Help
Font: Tms Rm 🔮 Pts: 10 🛢	BZK
	±
	_
	<u>ت</u>
Program Manager	

You can open as many application windows as your computer's <u>memory</u> allows. Each new window you open becomes the <u>active window</u> and overlaps other open windows.

If you are running Windows in <u>386 enhanced mode</u>, most <u>non-Windows applications</u> can run in windows too.

Related Procedures

Procedures

Changing a Window's Size Maximizing a Window Minimizing a Window Moving Windows, Icons, or Dialog Boxes Selecting Windows or Icons Starting Applications



Usually the title bar for the active window is a different color or intensity than that of inactive windows. This difference makes the active window easier to identify.

Document Windows

With some <u>Windows applications</u>, you can open several documents in the same workspace. These documents appear in their own windows, like this:



Document windows belong to applications. They open inside an application's workspace and share the application's menu commands. When you close the application or <u>minimize</u> it, the document windows close or shrink with it.

You can move and resize document windows inside the application's workspace. Each document window has its own <u>Control menu</u>.

Related Procedures

document window

A window inside an application window. Each document window contains a single document or other data file.

In Program Manager, document windows are called group windows. In File Manager, there are two types of document windows: the Directory Tree window and directory windows.

Procedures

Arranging Document Windows Changing a Window's Size Minimizing a Window Moving Windows, Icons, or Dialog Boxes Opening the Control Menu

Control-Menu Box

The Control-menu box for an application opens into a Control menu like this:

0	
Ī	<u>R</u> estore
<u> 1</u>	Move
:	<u>S</u> ize
1	Mi <u>n</u> imize
	Ma <u>x</u> imize
1	<u>C</u> lose
:	S <u>w</u> itch To

Control-menu commands like these are especially useful for operating Windows with your keyboard. You can also open Control menus for documents and some dialog boxes. The contents of Control menus can vary. 🛨

Here's a Control menu for a dialog box:



Title Bar

All application windows, document windows, and dialog boxes have title bars.

Title Program Manager _ • * Maximize button Minimize button Control-menu box

When you want to move a window or <u>dialog box</u> with your mouse, you <u>drag</u> its title bar to the new location. The color of the active window's title bar makes it easy to identify.

 Image: Related Procedures

title

Tells you which application, document, or dialog box occupies the window.

Maximize button

Enlarges the application window to cover the entire desktop or enlarges the document window to fill the application's workspace.

Minimize button

Reduces the application or document window to an icon.

Control-menu box

Gives you access to commands for moving, resizing, maximizing, minimizing, switching among, and closing application and document windows.

Concepts

Control-Menu Box Maximize Button Minimize Button

Procedures

Maximizing a Window Minimizing a Window Moving Windows, Icons, or Dialog Boxes Opening the Control Menu

Minimize Button



You can use your mouse to reduce a window to an icon by clicking the Minimize button.

Sometimes you'll have so many applications and documents open that your screen will seem cluttered.

Click 🛨 to see how crowded a desktop can get.

Using the Minimize button is a quick way to temporarily reduce the clutter. When minimized, application windows shrink to icons at the bottom of the desktop. Some document windows shrink to icons at the bottom of the application workspace.

Click 🛨 to see a minimized application window.

When you want to restore the window to its previous size, double-click its icon.

Related Procedures

Procedures

<u>Minimizing a Window</u> <u>Restoring a Window or Icon to Its Previous Size</u>





The applications and documents you reduce to icons are still running. They are still in computer memory, ready to be restored to a window whenever you are ready to use them again.

Maximize Button



You can use your mouse to enlarge a window to its maximum size by clicking the Maximize button.

Sometimes you'll have so many applications and documents open that your screen will seem cluttered.

Click 🛨 to see a cluttered desktop.

Using Maximize is a quick way to temporarily enlarge the window you're working with so that it covers all the others. Maximized application windows cover the entire desktop. Maximized document windows fill the application's workspace.

Click 🛨 to see a maximized application window.

When you want to return the window to its previous size, click the Restore button.

Related Topics

Concept Restore Button

Procedures Maximizing a Window Restoring a Window or Icon to Its Previous Size



Hicrosoft Word	▼ \$
■ <u>File</u> <u>Edit</u> <u>Yiew</u> <u>Insert</u> <u>Format</u> <u>U</u> tilities <u>Macro</u> <u>Window</u>	Help
Font: Tms Rm 🛢 Pts: 10 🛢 🛛 포츠 브빌프 🗧 🗶	
Style: Normal & EESAE == EE Etit	<u>+ 16.</u>
Bod Cu.4 4/4 0/4* 1.4 Col4	•

 Clicking the Restore button returns the window to its previous size.

Notice that maximized windows do not have borders. You must use the Restore button to resize them.

Restore Button



When you click the Restore button, a maximized window returns to its previous size.

Related Procedure

Menu Bar

You open menus by selecting a menu name from the menu bar.

Â	an pa		1 TO		
<u>F</u> ile	<u>E</u> dit	<u>S</u> earch	<u>H</u> elp		

Some menu names, such as File, Edit, and Help, are common to many applications. Other menu names vary from one application to another, depending on the functions that are available.

Related Procedure
Menus

You can determine what an application does by choosing commands from menus. Menus open by dropping down from the application's menu bar or Control-menu box. Menu contents vary, but these features are consistent throughout Windows:

<u>M</u> enu		
<u>U</u> ndo —		- Dimmed command
<u>S</u> ave Print -	Ctrl+S-	— <u>Shortcut key</u> — Ellinsis
<u>E</u> dit	▶-	<u>Triangle</u>
√ <u>P</u> alette —		

Menus stay open until you choose a command or cancel them. Related Procedures

+

dimmed command

A command that is currently unavailable.

shortcut key

Indicates a keystroke that you can use to choose a menu command quickly.

ellipsis

Indicates a dialog box will appear when you choose the command.

triangle

Indicates that a cascading menu or submenu will open if you choose the command.

checkmark

Appears next to commands you have activated. No check mark appears when they're inactive.

Procedures

<u>Choosing Menu Commands</u> <u>Opening the Control Menu</u> <u>Selecting and Canceling Menus</u>

Dialog Boxes

Dialog boxes request information that Windows needs before before carrying out a command. You provide the information by specifying options like these:



title bar

Identifies the name of the dialog box.

text box

Box in which you type information, such as a filename. Typing and editing an entry in a text box is similar to typing in Windows documents.

check box

Box for selecting an option. You can select as many check boxes as you want.

option button

Button for selecting an option. You can select only one option button in a given area of a dialog box.

list box

Shows names of directories and files you can select.

command button

Carries out a command. Command buttons with an ellipsis (...) expand the dialog box. Command buttons with chevrons (>>) open a related dialog box.

Procedures

Browsing Through the Directories List Box Filling inText Boxes Moving Within Dialog Boxes Selecting and Clearing Check Boxes Using Drop-down List Boxes Using Spin Boxes

Workspace

You create and edit documents in the active window's workspace using the mouse pointer and insertion point:



You can change the size and shape of your workspace by enlarging or reducing the size of the window. Or you can click the <u>Maximize button</u> to enlarge the window to its maximum size.

Related Procedure

mouse pointer

Moves with your mouse as you select and move Windows elements.

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.



- I For selecting text with your mouse.
- \Leftrightarrow For changing the size of a window with your mouse.
 - For changing the location or size of a window with your keyboard.
 - For indicating the application is processing your request.

insertion point

船

8

Shows you where text or graphics will appear. Whatever you type or paste appears at the insertion point.

Some applications display insertion points differently. For example, Terminal has three styles from which you can choose.

When you enter text, the insertion point moves ahead of the text as you type (or transfer information from the Clipboard). You can use your mouse or the ARROW keys to move the insertion point up, down, left, and right in the text area.

Scroll Bar

When you want to see information that isn't visible in a window, you can scroll to it quickly with your mouse and the Windows scroll bars. Use vertical scroll bars to move the document up and down and horizontal scroll bars to move it from side to side.



scroll arrow

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 box

Indicates your relative position within a document or list box. You 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.

scroll bar

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.

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

Borders

When you want to change the size of a window with your mouse, you <u>drag</u> the window's borders. Window borders define the outer edges of application and document windows.



border changes the height.

To change the size of a window with your keyboard, choose commands on the application's <u>Control</u><u>menu</u>.

Related Procedure

Icons

Icons are graphical representations of elements in Windows. They make starting applications and opening documents quick and easy:



In addition to the icons shown above, each Windows application can have its own icons that are not necessarily used by any other application.

program item icon

Represents an application you can start from Program Manager.

group icon

Represents a group window that is minimized.

application icon

Represents an application that is minimized.

Program Item Icons

You can start applications and open documents by choosing program item icons from a Program Manager group. The easiest way to start an application is to double-click its icon.



You can add program items to (and delete them from) existing groups as well as new groups.

Related Procedures

program item icon

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

application icon

Represents an application that is minimized.

Many Windows applications use the same graphic for their application icons that Program Manager uses for its program item icons.

Procedures

Adding Items to a Group Starting Applications from Groups

Application Icons

Application icons represent running applications. They appear at the bottom of your desktop only after you:



Minimize an application.

Switch back to Windows from a non-Windows application that is running full screen.



Application icons help you work faster. Suppose you know you are going to use Write, Calendar, and your spreadsheet during a Windows session. You open each application by choosing its program item icon from Program Manager groups.

Then you minimize all applications but the one you'll use first. That way, your desktop is clear for the application you are using, but the others are readily available.

NOTE: Remember, applications that are running take up <u>memory</u> even when running as icons.

Related Procedures

Procedures

Minimizing a Window Switching Among Application Windows

What Microsoft Windows Can Do

Here are some of the ways Windows can work for you:

Windows organizational tools, such as Program Manager, help organize applications and documents into groups. File Manager gives you control of the organization and management of all your files.

Windows applications run in individual windows. By moving and resizing these windows, you can view multiple applications.

Windows provides several ways to switch among applications quickly.

Windows editing tools and Clipboard make transferring text and graphics among applications easy and fast. And you can keep both applications running while you transfer information.

Windows ability to link information in one application with the same information in another application helps you keep all your documents updated automatically.

Windows can operate in three distinct modes, depending on the computer you're using and the amount of memory it has. For example, when operating in standard mode, Windows makes use of extended memory so you can switch among non-Windows, as well as Windows, applications.

The way Windows uses your computer's memory makes it possible to run several applications at once and work with large documents without running out of memory.

E Related Concepts

Concepts

Automatic Updates Between Documents How to Switch Among Applications How to Transfer Information How to Work with Several Documents How Windows Helps You Organize How Windows Uses Memory Windows Modes

How Windows Helps You Organize

If you work with a number of applications and documents throughout the day, Windows can help by putting them into groups that make them easier for you to use.

Suppose you use these applications to produce a monthly newsletter:

This application	Is used for
Write	Creating and editing text
Paintbrush	Creating graphics
Calendar	Scheduling
Clock	Tracking time
File Manager	Organizing and deleting files
Solitaire	Coffee breaks
Using Program Man group.	ager, you can bring all these applications and their related documents into a single

Click 主 to see what the Newsletter group might look like.

 Related Procedures

Procedures

Adding Items to a Group Creating Groups


Choosing an icon from a group starts the application.

To work on the newsletter, you would simply open the Newsletter group (in Program Manager) and choose the icons that start the applications you want to use.

How to Switch Among Applications

Because of the way Windows uses your computer's <u>memory</u>, you don't have to quit one application before starting another. You can run as many applications as memory will allow, and switch among them quickly. Switching saves you time since you don't have to quit one application before you start another.

You can switch from an active application to an inactive application in four ways:

Click the inactive application window with your mouse.
 Hold down the ALT key and press the ESC key. Repeat

Hold down the ALT key and press the ESC key. Repeat until the application you want is active.

Open the Task List by double-clicking anywhere on the desktop. Then choose the inactive application from the list.

• Open the active application's <u>Control menu</u> and choose the Switch To command. Then choose the inactive application from the list.

Related Topics

Keys

System Keys

Procedures

Opening the Control Menu Selecting Windows or Icons Switching Among Application Windows Switching to Applications For example, you could work on a newsletter article in your word processor . . .



- w	rite-PICNIC.WRI
File Edit Se	arch Character Paragraph
Document	Help
WHAT: Free f	ood and drink – sheltered picnic 💻
and baseb	Calendar 🗾 🔺
E	ile Edit Yiew Show Alarm Options Help
Page 1	2-15 DM W W Tuesday, May 28 1001
	2.10FM R 10cs0ag, Mag 20,1771
	8:00
	9:00
L	10.00
_	
Duran Maran	
Program manage	

How to Transfer Information

You can select information in one application and transfer it to another.

Suppose you want to include a map in a flyer you're creating. You can move the map artwork from your drawing program into the text in your word processor like this:



3. Paste the map from the Clipboard to your flyer.



By transfering information in this way, you can bring work from a number of applications into a single, compound document.

NOTE: Information stays on the Clipboard until you transfer something else to it or exit Windows.

Related Topics

Procedures

Copying the Window or Screen with Non-Windows Applications Copying with Non-Windows Applications Copying, Cutting, and Pasting with Windows Applications Pasting into a Full-Screen, Non-Windows Application Pasting into a Windowed, Non-Windows Application

How to Work with Several Documents

Sometimes you'll want to compare information in two applications. Instead of switching between the applications, you can reposition and resize their windows so they both fit on the screen.

Click 主 to see windows resized in this way.

In fact, with some <u>Windows applications</u> you can open several documents at a time. Each one appears in its own document window. You can position and adjust these windows to fit side by side as well.

Click 🔃 to see an application with several documents.

Related Topics

Procedures

Arranging Document Windows Changing a Window's Size



Microsoft Word File Edit Yrew Insert Format Utilities Macro Window			
Pipti Mil	BRIEF.DUC		

 Three documents are open in one application.

Automatic Updates Between Documents

Some Windows applications allow dynamic data exchange between Windows applications. Suppose you want to include the same information in a business report that you keep track of in a spreadsheet, and both applications allow dynamic data exchange.

Setting up the link between the two is simple. You select the data from the spreadsheet and copy it to the Clipboard using the Copy Link command. Then you paste it into the report using the Paste Link command. Whenever you change that information in the spreadsheet, it is updated automatically in the report.

The Mouse, The Keyboard, or Both

You can use either your mouse alone or your keyboard alone to operate Windows. But you'll probably find that using some combination of both gives you maximum efficiency and ease of use.

Your mouse works best for actions like these:

- + Moving windows and icons by dragging title bars.
- + Changing the size of a window by dragging borders.
 - Starting and quitting applications by double-clicking.
- + Scrolling through documents with scroll bars.
- + Enlarging or reducing windows by clicking the Maximize or Minimize buttons.

+ Selecting large blocks of text by dragging from the first character to the last you want to include.

After you learn key combinations, your keyboard might be faster for actions like these:

- + Opening menus by pressing ALT and then the underlined letter. +
 - Choosing commands by pressing the underlined letter.
 - Switching among open applications by pressing ALT+ESC.

+ Using any of the shortcut key combinations that appear on menus (such as ALT+F4 to close a window).

How Windows Uses Memory

Your computer's memory is limited. It is located on chips on the main system board inside the central processing unit. Memory is measured in <u>bytes</u>. Your multimedia computer comes with at least 2 megabytes (MB) of memory, but you can add more.

Computer memory is a temporary storage space. It contains only the information you give it, and the information remains in memory until you replace or erase it, or turn off your computer.



Before you can use your computer, MS-DOS must be loaded into memory. Before you can use an application, the application must be loaded into memory. Documents also require memory space.

When you close documents or exit most applications, they are cleared from memory. (Some applications are memory-resident, meaning they stay in memory after you exit them. However, when you turn off your computer, they are also removed from memory.)

Disk space is different from memory.



Although the space on a disk is limited too, it is more permanent than memory. When you save a file on a disk, it stays there until you erase it, even after you turn off your computer.

What Are Memory Limitations?

MS-DOS is the operating system your computer uses. MS-DOS can recognize up to 640K of memory. But many of today's powerful applications require more than 640K of memory.

Windows 3.0 recognizes and manages memory beyond the 640K limit of MS-DOS. Windows can use all the memory your computer has (up to 16 MB). This means you can run several applications simultaneously and work with much larger document files without running out of memory.

Three Types of Memory

Windows can use these three kinds of memory:

- Conventional memory
- Expanded memory
- Extended memory
- Related Concepts

Concepts

Conventional memory Expanded memory Extended memory

Conventional Memory

Your computer has at least 2 MB of memory. Of that, at least 256K is conventional memory. Most computers can accommodate 640K.

Conventional memory is the kind MS-DOS uses first. Here's how MS-DOS distributes conventional memory when you start your computer:

- 1 MS-DOS loads itself into some of your computer's conventional memory.
- 2 MS-DOS starts the utilities and applications listed in your CONFIG.SYS and AUTOEXEC.BAT files. These utilities and applications use up more conventional memory.
- 3 The memory that is left over is available for running applications (including Windows).

Extended Memory

Extended memory is general-purpose memory beyond the 640K of conventional memory. Your computer has more than 1 MB of extended memory.



your computer's memory.

Windows includes a file named HIMEM.SYS, the extended memory manager required to run Windows in <u>standard</u> or <u>386 enhanced</u> mode.

In standard or 386 enhanced mode, Windows takes full advantage of extended memory and its performance benefits. In <u>real mode</u>, Windows uses extended memory only for storing information that would otherwise be discarded and later read back from the disk.

Extended memory works well with <u>Windows applications</u>. However, not all <u>non-Windows applications</u> were designed to take advantage of it.

Expanded Memory

You can add memory beyond conventional memory to most computer systems by installing a piece of hardware called an expanded memory board and loading memory manager software.



your computer's memory.

The expanded memory board contains memory chips. The expanded memory manager is a program that answers an application's requests (including those of Windows) for more memory.

Not all applications were designed to recognize expanded memory. However, since expanded memory was on the market before extended memory, more applications recognize it.

Because an expanded memory manager releases expanded memory in measured amounts (64K), using it is slower and more cumbersome than using extended memory. Windows uses expanded memory only when running in <u>real mode</u>. (When running in <u>386 enhanced mode</u>, Windows can simulate expanded memory for applications that require it, even if your system does not actually have any.)

Windows Modes

Windows is versatile. You can run it on several generations of personal computers, from the earlier 80286 to the more powerful 80386 and 80486. To make the full power of each computer available, these three operating modes are included with Windows:

■ 386 enhanced mode

E Standard mode

主 Real mode

When you type **win** at the MS-DOS command prompt and press ENTER, Windows starts in standard mode if it is running on an 80286 computer or in 386 enhanced mode if it is running on an 80386 or 80486 computer.

The only reason for starting Windows in real mode is to run Windows 2.x applications or some older MS-DOS applications. Real mode has no multimedia functionality, such as sound or animation.

To discover which mode Windows is using, choose the About command from the Help menu in Program Manager or File Manager.

Related Concepts

Concepts

<u>386 enhanced mode</u> Options for Starting Windows Real mode Standard mode



The About message also tells you how much memory is available to Windows and the percentage of system resources that are free.

Real Mode

If you want to run Windows 2.x applications or some older MS-DOS applications, you should start Windows in real mode.

Since older Windows applications were designed for real mode, you should have no problem operating them successfully in that mode. However, in real mode, Windows does not use <u>extended memory</u>. Only your system's <u>conventional memory</u> and <u>expanded memory</u> will be available to applications.

Standard Mode

If your computer system is an 80286 with 2 MB of RAM, Windows starts in standard mode:



80286 machine

This mode provides access to <u>extended memory</u> and enables switching among <u>non-Windows</u> applications.

With access to extended memory, more Windows applications can run at the same time and can run faster than they could without the additional memory.

386 Enhanced Mode

If your computer system is an 80386 or 80486 with more than 2 MB of RAM, Windows operates in real, standard, or 386 enhanced mode:



In 386 enhanced mode, Windows can use the <u>virtual memory</u> capabilities of the Intel 80386 processor. With virtual memory capabilities, Windows applications can use more memory than is physically available.

386 enhanced mode also allows for the <u>multitasking</u> of <u>non-Windows applications</u>. Windows provides settings for multitasking so you can allocate system resources between Windows applications and non-Windows applications. This is a way of optimizing your operating environment.

Finally, 386 enhanced mode gives you greater control over non-Windows applications. For example, instead of non-Windows applications taking up the entire desktop, you can run most of them in their own windows. That way, you can take full advantage of the graphical environment.

Related Procedure

What Mode to Use

Windows can run in three modes: <u>real mode</u>, <u>standard mode</u>, or <u>386 enhanced mode</u>. When you type **win** at the MS-DOS command prompt and press ENTER, Windows examines your system's configuration and starts in the most appropriate mode for your system.

Sometimes you might want to run Windows in a different mode. If you try to start an application that was designed for a previous version of Windows, a message might appear, telling you to start Windows in real mode.

To start Windows in a specific mode, type one of the following switches after you type **win** at the MS-DOS command prompt.

Use this switch	To do this
/r	Run Windows in real mode. Use this mode to run Windows 2.x applications.
/s	Run Windows in standard mode. Windows will automatically choose this mode if your computer is an 80286.
	You might also want to use this mode if your computer is an 80386 with between 2 and 3 MB of memory, and you do not use non-Windows applications with Windows. On such systems, Windows runs faster in standard mode than in 386 enhanced mode, as long as you use only Windows applications. You might also want to use this switch if you are having hardware compatibility problems when running in 386 enhanced mode.
/3	Run Windows in 386 enhanced mode. Windows will choose this mode automatically if your computer is an 80386.
	Windows will probably run more slowly in 386 enhanced mode than in standard mode, but even so, you might prefer to use this mode.

NOTE: To determine what mode Windows is running in, choose About Program Manager from the Program Manager Help menu.

example

For example, to run Windows in real mode, you would type **win /r** at the MS-DOS command prompt.

How to Use Expanded Memory in Real Mode

When running in real mode, Windows can use your system's <u>expanded memory</u> if there is any. When Windows starts in real mode, it examines your system's memory configuration and determines the most efficient way to use the expanded memory.

If you want to control the way Windows uses expanded memory, you can type one or more of these switches immediately after you type **win** at the MS-DOS command prompt.

Use this switch	To do this
/e	Tell Windows how much conventional memory must be available to use large-frame EMS mode. If there is less conventional memory available than the amount you specify, Windows starts in small-frame <u>EMS</u> mode instead.
/L	Move the EMS bank line up or down by 1-K increments. To move the bank line up, specify the /L switch, followed by a plus sign (+) and the number of kilobytes you want to move the bank line. For example, to move the bank line up 16K, you would specify the value /L+16. To move the bank line down, specify the /L switch, followed by a minus sign (-) and the number of kilobytes you want to move the bank line. For example, to move the bank line down 8K, you would specify the value /L-8. (Because the EMS bank line exists only in large-frame EMS mode, the /L switch has no effect when Windows uses small-frame EMS mode.)
/n	Prevent Windows from using any expanded memory. When running in real mode, Windows normally uses expanded memory if it is available.

EMS memory

A type of expanded memory available on systems that conform to the Lotus-Intel-Microsoft Expanded Memory Specification (LIM EMS).

example

For example, to run Windows in real mode and prevent it from using any expanded memory, you would type **win /r /n** at the MS-DOS command prompt.

About Applications

With Windows, you can start as many applications as your computer's memory will allow. This means that you don't have to exit one application before starting another. And you can switch between applications quickly.

Many applications run in <u>application windows</u>. Others require the entire <u>desktop</u>. All applications can run minimized as application icons.



Windows 3.0 recognizes these four basic types of applications:

- + Windows 3.0 applications
- + Windows 2.x applications
- **+** Non-Windows applications
- + Memory-resident applications

You can include all these types in Program Manager groups. However, each type behaves slightly differently and requires a different approach.

+ **Related Concepts**

Concepts

Memory-Resident Applications Non-Windows Applications Windows 2.x Applications Windows 3.0 Applications

Windows 3.0 Applications

Windows 3.0 applications were designed for this version and will not run without it. These applications take full advantage of the Windows graphical environment and its <u>memory</u> management capabilities.

Windows 3.0 applications use your computer's memory cooperatively. Windows shifts memory from one application to another as needed.

You might have some applications that were designed to run with previous versions of Windows. They too are called Windows applications. They work with Windows 3.0, but many can't take full advantage of Windows 3.0 features.

When you purchase new applications or request upgrades, you should mention that you will be using them with Windows 3.0.

Windows 2.x Applications

Windows applications that were designed for older versions might not work correctly with Windows 3.0. You can tell if an application is an older one by starting it with Windows in standard mode or 386 enhanced mode.

In standard or 386 enhanced mode, Windows checks the application you are starting to make sure it was designed for Windows 3.0 and can run successfully in the current mode. If not, you'll see this message:

Applications Compatibility Warning			
The application you are about to run, OLDAPP.EXE, was designed for a previous version of Windows.			
You should obtain an updated version of the application that is compatible with Windows 3.0. To run the current version of the application, choose Cancel. Then, exit Windows, restart it by typing Win/r, and start the application again. If you choose OK and continue to start this application, you might encounter compatibility problems that could cause the application or Windows to terminate unexpectedly.			

In general, when you see this message, you should choose Cancel. Then you can: +

Start Windows in real mode.

Obtain an updated version from the manufacturer.

Since older Windows applications were designed for real mode, most will start successfully in that mode. However, in real mode, Windows does not use extended memory. Only your system's conventional memory and expanded memory will be available to applications.

If you do try to run a Windows 2.x application in 386 enhanced or standard mode, Windows might become unstable or terminate unexpectedly.

example

For example, to start Windows in real mode, you would type **win /r** at the MS-DOS command prompt.

Non-Windows Applications

Non-Windows applications were not designed for Windows. Such applications do not include elements of the Windows graphical design, nor do they take advantage of <u>memory</u> sharing. However, most will run successfully in all three Windows modes.

If you run Windows in <u>386 enhanced mode</u>, you can run most non-Windows applications in their own windows. This makes it easier to share information between applications. You can also run multiple non-Windows applications simultaneously.



If you use <u>real mode</u> or <u>standard mode</u>, non-Windows applications cover the entire desktop and cannot run in their own windows.

1	Non-Windows application running full-screen
27788881 Own Solven Person's Gal Save So Kar Jymer's Jave Learn Mill 40 Belliner 75 July Balt Save Save Yeannets Seman'w Lis Si Labre Sol Solumer's co 2700 No. Ye two way Sol Solumer's co 2700 No. Ye two way	
Example 1 Related Concept	

non-Windows application running in a window

An application that was not designed to run in Windows. In 386 enhanced mode, you can run a non-Windows application in a window.

Like Windows applications, you can have more than one non-Windows application running at a time. However, few non-Windows applications can take advantage of the ability of Windows to share memory resources among running applications. A non-Windows application requests a certain amount of memory when it starts, and keeps that memory until you exit it. That means you might see out-ofmemory messages when several large non-Windows applications are running.

non-Windows application running full-screen

An application that was not designed to run in Windows. In real and standard mode, you can only run a non-Windows application full-screen.

Like Windows applications, you can have more than one non-Windows application running at a time. But, unlike Windows applications, whenever you use a non-Windows application, the activities of any other open applications are suspended.

In addition, few non-Windows applications can take advantage of the ability of Windows to share memory resources among running applications. A non-Windows application requests a certain amount of memory when it starts, and keeps that memory until you exit it. That means you might see out-of-memory messages when several large non-Windows applications are running.
Memory-Resident Applications

Memory-resident software is loaded into <u>memory</u> when you start it, and is then available whenever you need it, even when another application is running. Memory-resident software comes in these two forms:

Utilities that load various drivers and network software automatically when you start up your computer.

Pop-up programs that stay in memory when you start them, but don't show up on your screen until you press a key combination.

Related Concepts

Concepts

Pop-up programs Utilities

Utilities

Utilities are special programs that load information your computer needs before you can use certain hardware, such as a mouse or network serverj, and even some applications. Normally, you do not interact directly with these utilities.

If you want such memory-resident information to be available to all Windows and non-Windows applications, make sure it loads before you start Windows. The best way to do this is to include the information in your <u>CONFIG.SYS</u> or <u>AUTOEXEC.BAT</u> file.

NOTE: Some software programs do this for you during installation.

When you start up your computer, MS-DOS is loaded into <u>memory</u> first, followed by the information in your CONFIG.SYS file and then your AUTOEXEC.BAT file. The memory that is left is available for running your applications.

Sometimes you'll have one application that requires memory-resident information that's not required by the other applications you use. You can keep this information from reducing available memory until it is needed by starting it in one of these two ways:

Create an MS-DOS batch file that loads the information and then the application. You can run that batch file from Windows.

If only a particular Windows application needs the memory-resident information, you might want to load it from the special batch file WINSTART.BAT. When you use this batch file, the utility is available to Windows applications, but not to non-Windows applications. This ensures that no memory will be taken from non-Windows applications.

Related Procedure

Pop-up Programs

Pop-up programs stay in <u>memory</u> after you start them. When a pop-up program is active, all other applications are suspended. These applications become available again as soon as you dismiss the pop-up.

You should start pop-up programs, such as Borland's SideKick, directly from Windows. You can then switch to and from that program as you would any non-Windows application.

When you start a pop-up program, Windows displays this message confirming that the program has been loaded:

MICROSOFT WINDOWS POPUP PROGRAM SUPPORT

Your popup program is ready to run. When you have finished using it, press CRTL+C to close this window and return to Windows.

When you want to use the pop-up, press the key combination that causes the program to pop up, just as you would without Windows. You can also switch to a pop-up program using normal Windows methods rather than by pressing the key combination.

Sometimes you might use a pop-up program only in conjunction with one other application. In that case, you can wait to load the pop-up until you start the application.

For example, you might want to load Borland's SideKick in conjunction with the Framework II application. To do so, you could create a batch file that starts Sidekick and then starts Framework II.

Sidekick would then be available from Framework II and would not take away memory from other applications.

NOTE: Some pop-up programs require a key combination that is usually reserved for Windows (for example, ALT + ESC). You can change the key combination by modifying the pop-up program's program information file (PIF). To do so, use PIF Editor from the Accessories group in Program Manager.

E Related Procedure

Options for Starting Windows

You generally start Windows by typing win at the MS-DOS command prompt. Windows examines your hardware and starts in the most compatible mode.

However, sometimes you might want to start Windows in a different mode, or have Windows run a particular application at startup.

The command you type to start Windows can indicate:

+ What mode to use +

+

How to use expanded memory in real mode

Which application or command to start when Windows starts

The Windows command line looks like this:

Tells MS-DOS to start Windows. This part is required.

Tells which mode to run and how to use expanded memory.

> Tells which application and document to open after starting Windows.

win /r \pbrush\paint.exe\logo.bmp

Click 主 to see other examples of command lines. +

Related Concepts

Concepts

How to Start an Application with Windows How to Use Expanded Memory in Real Mode What Mode to Use

How to Start an Application with Windows

The command you use to start Windows can include the <u>pathname</u> to an application and the program filename. That way, the application is loaded immediately after Windows starts.

For example, the following <u>command line</u> starts Windows, then immediately loads Microsoft Excel:

win c:\excel\excel.exe

If you are also including one of the mode or memory switches, make sure you type the pathname and program filename last on the command line.

For example, the following command line starts Windows in real mode, then immediately runs the application MYEDITOR.EXE:

win /r myeditor.exe

Click 主 to see other examples of command lines.

command line

Information you type at the MS-DOS command prompt to tell MS-DOS what to do. These are standard parts of a command line:

Tells MS-DOS to start Windows. This part is required.



sample command lines

+ Starting Windows in real mode

win /r

+ Starting Windows and an application

win d:\editors\textedit.com

Tells Windows that TEXTEDIT.COM is in the \EDITORS directory on drive D.

+ Starting Windows and editing a document

win /s agenda.txt

Starts Notepad. Windows "associates" documents so they start the Windows application used to create them.

Ŧ Starting Windows and an application, and editing a document

win c:\word\word.com letter.doc

Starts Windows, then starts Microsoft Word and opens the Word document LETTER.DOC. +

Canceling expanded memory

win /r /n

Starts Windows in real mode (/r) and prevents it from using any expanded memory (/n).

New Features of of Windows 3.0

If you have a previous version of Microsoft Windows, you might have noticed these additions to version 3.0:



In addition, three new applications--Program Manager, File Manager, and Task List--provide more powerful, more intuitive ways to start programs, manage files and directories, and switch between running applications.

One of the most dramatic improvements is the way Windows 3.0 can use <u>memory</u>. Windows looks beyond the previous limitation of 640K and uses <u>extended memory</u>, the additional memory that is available in today's more powerful personal computers. With extended memory, you can run several applications at once and work with much larger document files without running out of memory.

Here are other new features and improvements:

A new Setup program makes it easier to install Windows and later view or change your setup options.

Multimedia enhancements include support for audio, animation, MIDI, and near-photographic images.

With the redesigned Control Panel, you can connect to network printers, set up additional ports, set <u>multitasking</u> options for <u>386 enhanced mode</u>, and customize the appearance of your <u>desktop</u>.

Print Manager provides more information about files that are printing--allowing you to view network print queues, for example.

With Program Manager, you can organize your applications into distinct groups and then start the applications and their related documents quickly and easily.

File Manager allows a full range of mouse maneuvers so you can copy and move files and directories by dragging and dropping their <u>icons</u> with your mouse.

With File Manager, you can also connect to and disconnect from <u>network servers</u> while using Windows.

With Recorder, you can save a series of keyboard and mouse sequences and play them back whenever you want to repeat the sequence. This procedure creates what is known as a macro.

With Paintbrush, a more powerful and sophisticated painting program, you can create full-color illustrations.

Terminal supports new terminal emulations, communications protocols, file-transfer capabilities, and the assignment of multiple keystroke sequences to single keys.

Printing support has been improved for HP/PCL and PostScript printers.

With new commands, you can rearrange the windows on your desktop, making them easier to find and view.

A new, expanded symbol <u>font</u> set is included.

Running Windows in <u>386 enhanced mode</u> provides increased control over <u>non-Windows</u> <u>applications</u>.

+
+
+

System messages now include clear explanations and recommended remedies. With a new game, Solitaire, you can practice the basic skills you use to operate Windows. Related Concept

If You Have a Previous Version of Windows

If you have applications that were designed for previous versions of Windows (2.x) and you want to use them with Windows 3.0, you can:

Start Windows in real mode. All Windows 2.x applications were designed to run in real mode and + will probably have trouble running in any other Windows mode. +

Request an upgrade for your 2.x applications.

Related Concepts

Concepts

What Mode to Use Windows Modes





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



N network printer network queue network server non-Windows application



O open option button



Р

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



T Task List text box text file title title bar topic track



U <u>Up button</u>


V vector font virtual memory volume label

Ŧ

waveform WAVE format wildcard characters window window border Windows application wrap







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



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:

S	International		5	
5	United States	Ŧ	2	When you click this arrow
- 5	Sweden	+	- X	the box closes.
₹.	Switzerland (French)		1	
Ъ.	Switzerland (German)		12	
€.	Switzerland (Italian)		2	
-ζ	Taiwan		2	
7	United Kingdom		J.	
5	United States		1	
Į.	Other Country	+	1	
1	and the	_	-5	

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 B Write - 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

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.





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
- 7 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.
+	For selecting text with your mouse.
+	For changing the size of a window with your mouse.
Ŧ	For changing the location or size of a window with your keyboard.
+	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.

orall 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.

-Windows Basics Procedures-

Click a folder or topic title.

+	Working	with	Windows
_			

+

+

+

Working with Windows
Working with Menus
Working with Dialog Boxes
Working with Applications
Working with Applications and Files +

Windows Basics Procedures

Click a folder or topic title.

- Selecting Windows or Icons Moving Windows, Icons, or Dialog Boxes Changing a Window's Size Minimizing a Window Maximizing a Window Restoring a Window or Icon to Its Previous Size Using Scroll Bars Closing Active Windows
- Working with Dialog Boxes

-Windows Basics Procedures-

Click a folder or topic title.

+	Working	with	Windows

Working with Menus

Selecting and Canceling Menus Choosing Menu Commands Opening the Control Menu

- Working with Dialog Boxes
- Working with Applications
- Working with Documents and Files

-Windows Basics Procedures

Click a folder or topic title.

+	——Working with Windows
+	
+	Working with Dialog Boxes

Moving Within Dialog Boxes Selecting and Clearing Check Boxes Choosing Command Buttons Using Drop-down List Boxes Using List Boxes Browsing Through the Directories List Box Selecting Option Buttons Filling inText Boxes Using Spin Boxes Closing Dialog Boxes —Working with Applications

Working with Documents and Files

+

-Windows Basics Procedures

Click a folder or topic title.

+	
+	-Working with Menus
+	-Working with Dialog Boxes
-	-Working with Applications



-Windows Basics Procedures

Click a folder or topic title.

Working with Menus

Working with Dialog Boxes

Working with Applications

Working with Documents and Files

Switching Among Document Windows Arranging Document Windows Moving the Insertion Point Entering Text Correcting Typing Mistakes Selecting Text Editing Selected Text



Selecting Windows or Icons

In Windows, you first <u>select</u> a <u>window</u> or <u>icon</u> to indicate what you want to work on. Commands and actions affect the window or icon you selected. The window you're working on is the <u>active</u> window.

To select a window and make it active:

Click anywhere inside the window except the <u>Minimize</u> and <u>Maximize</u> buttons. The window is brought to the front; its <u>title bar</u> is highlighted, and its scroll bars and other elements become visible.

To select an icon:

- 1 Position the tip of the <u>pointer</u> on the icon.
- 2 Click the left mouse button.

The icon becomes highlighted to show that it is selected.



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Related Concepts Keyboard Procedure

Concepts

<u>lcons</u> <u>The Windows</u>

Moving Windows, Icons, or Dialog Boxes

You can move application windows, document windows, icons, and any dialog box that has a title bar.

To move a window, icon, or dialog box:

- 1 <u>Drag</u> the icon or the title bar of a window or dialog box to a new location. An outline of the icon, window, or dialog box moves as you drag it.
- 2 Release the mouse button when the icon, window, or dialog box is positioned where you want it. To cancel the move, press ESC anytime before you release the mouse button.
- E Keyboard Procedure

Changing a Window's Size

You might want to change the size and shape of the <u>windows</u> open on your <u>desktop</u>. For example, to compare the contents of two documents, you could reduce the size of both windows until they fit side by side on the screen.

The minimum size for all windows is about 2 inches by 1 inch. In addition, some <u>application windows</u> have size limitations. For example, the Windows Setup window has a fixed size.

To change the size of a window:

- 1 <u>Select</u> the window you want to resize.
- 2 Point to a border or corner.

The pointer changes to a two-headed arrow.

3 Drag the corner or border until the window is the size you want.

If you drag a border, the window size changes only on the side whose border you drag. If you drag a corner, the two adjoining sides move at the same time.

An outline of the window border moves as you drag it.

4 Release the mouse button.

To cancel the resizing, press ESC before you release the mouse button.

Keyboard Procedure

+

Minimizing a Window

When you finish working with an application, but want it available for later use, you can reduce its window to an icon. When you shrink an application window to an icon with the Minimize button, the application is still running in memory, but its window does not take up space on your desktop. You can also minimize some document windows.

To minimize a window:

1 <u>Select</u> the window you want to minimize.

To minimize a document window that is maximized, you must first restore it to its previous size before you can minimize it.

- 2 Click the Minimize button. +
 - **Related Concept**

+

Keyboard Procedure

Maximizing a Window

You can maximize, or enlarge, most <u>application windows</u> to fill a large portion of the <u>desktop</u>, or even the entire desktop.

You can enlarge <u>document windows</u> to fill an entire application window except the menu bar space. You cannot maximize a document window beyond the boundaries of its application window.

To maximize a window:

- 1 <u>Select</u> the window you want to enlarge.
- 2 Click the Maximize button.

The window enlarges, and the Maximize button is replaced by the Restore button.

When you maximize a document window, it covers all other document windows and icons, and its name appears after the application's name on the <u>title bar</u>. The Maximize and Minimize buttons belong to the application. Only the Restore button affects the document window alone.

+ +

Related Concept

Keyboard Procedure

Restoring a Window or Icon to Its Previous Size

Restoring a window or icon returns it to the size and position it occupied before you enlarged or reduced it.

To restore a maximized window to its previous size:

Þ Click the Restore button.

To restore an icon to a window:

- Double-click the icon.
- + **Related Concept**
 - Keyboard Procedure

Using Scroll Bars

Some windows and dialog boxes have <u>scroll bars</u> you can use to view text that requires more than the available space.

To scroll	Do this	
Up or down one line	Click one of the scroll arrows.	
One window	Click the scroll bar above or below the <u>scroll box</u> on vertical scroll bars, and to the left or right of the scroll box on horizontal scroll bars.	
Continuously	Point to one of the scroll arrows and hold down the mouse button until the information you want comes into view.	
To any position	Drag the scroll box along the scroll bar to the place you choose.	
	The section of the document or list that moves into view depends on the placement of the scroll box. For example, if you position the scroll box halfway down the scroll bar, the text halfway through the document or list appears.	
Related Conc	ept	
Keyboard Pro	cedure	

Closing Active Windows

When you finish working with an application window, document window, or dialog box, you can close it.

To close the active window:

Þ

- Double-click the Control-menu box.
- If you have made changes to a document since last saving it, Windows prompts you to save the document before closing the window.
- E Keyboard Procedure

Selecting and Canceling Menus

Windows <u>commands</u> are listed on <u>menus</u>. Each <u>application</u> has its own menus, with a <u>Control menu</u> common to all applications. Other menus are represented by names in the <u>menu bar</u> at the top of each application window.

In Windows, you select a menu, and then choose a command from that menu. Choosing a command carries out an action.

To select a menu:

ь.

Point to the name of the menu on the menu bar and click the name to open the menu. You can drag the highlight down the menu if you want to move to a menu item immediately.

To cancel a menu:

- Click the menu name or anywhere outside the menu.
- Related Concept
- E Keyboard Procedure

Choosing Menu Commands

The items listed on <u>menus</u> are most often <u>commands</u>. But they can also be characteristics you assign to graphics or text (such as bold or centered), a list of open windows or files, or the names of cascading menus (menus that contain other menus). You use the same procedure, regardless of which items you choose.

To choose an item from a selected menu:

E Click the name of that item.

Windows applications follow these conventions when listing items on a menu:

This convention	Means
Dimmed item	The command is not available. You might have to select something before you can use the command, or you might not be able to use the command with your application.
Ellipsis ()	A dialog box appears when you choose the command, requesting information the application needs before carrying out the command.
Check mark	The command is active. This convention is used for commands that can be turned on or off.
Key combination	A key combination (such as SHIFT+F4) is a <u>shortcut</u> for this command. Use this key combination to <u>choose</u> the menu command without first opening the menu.
Triangle (主)	The command leads to a cascading menu, which lists additional commands that are available.
Click 主 to see an	example of each convention.

E Keyboard Procedure

<u>M</u> enu		
<u>U</u> ndo —		— Dimmed command.
<u>S</u> ave Ctr Print Edit	Ctrl+S-	Shortcut key
	b -	— Triangle
√ Palette –	,	- Check mark
_		

Opening the Control Menu

Application windows, document windows, application icons, group icons, and some dialog boxes have Control menus.

The procedure you use to open the Control menu varies slightly, depending on what you are working with.

To open the Control menu for an application window or application icon:

+ Click the Control-menu box in the upper-left corner of the window.

Or click the icon.

Be careful not to double-click; this will close the window or open the icon.

To open the Control menu for a document window or document icon:

+ Click the Control-menu box in the document window. Or click the document icon.

To open the Control menu for a dialog box:

Click the Control-menu box in the dialog box.

To open the Control menu for a non-Windows application running in 386 enhanced mode:

+ Click the Control-menu box in the upper-left corner of the window.

Or click the icon.

+

Be careful not to double-click; this will close the window or open the icon.

Control menus for non-Windows applications that are running in 386 enhanced mode are available from the windows of windowed applications and from the icons of full-screen applications.

Note that the Control menu for a non-Windows application running in 386 enhanced mode includes a cascading menu for the Edit command. You open the cascading menu by clicking it.

To open the Control menu for a non-Windows application running in standard or real mode:

1 Press ALT+ESC to switch from the running application back to Windows.

Non-Windows applications running in standard mode or real mode do not run in application windows, but occupy the entire screen. You can open their Control menus only by switching back to Windows. thereby reducing the non-Windows application to an icon. The Control menu is available from the application icon. 🛨

2 Click the icon to open the Control menu. +

Keyboard Procedure

hint

To find out which mode Windows is running in, switch to Program Manager and choose the About Program Manager command from the Help menu.

Moving Within Dialog Boxes

Often you need to move around within a <u>dialog box</u> to make several selections. The current option is marked by a <u>selection cursor</u> around the name of the option.

To move within a dialog box:

- + Click the option or group of options you want to move to.
 - Related Topics
- + Keyboard Procedure

Concept

Dialog Boxes

Procedure

Moving Windows, Icons, or Dialog Boxes

Selecting and Clearing Check Boxes

<u>Check boxes</u> indicate options you can switch on and off. You can select as many or as few check-box options as you want. When a check box is selected, it contains an X. When it is cleared, the box is empty. Names of options that are temporarily unavailable are dimmed.

To select check-box options: Click each empty check box you want to select.

+

To clear check-box options:



Click each check box that contains an X.

Keyboard Procedure

Choosing Command Buttons

<u>Command buttons</u> initiate an immediate action. One command button in each dialog box carries out the command you choose, using the information supplied in the dialog box. With other command buttons, you can cancel the command or choose from additional options.

To choose a command button:

Click the command button.

Like menu commands, command buttons use the following conventions:

This Convention	Means
Dark border	The button is currently selected or is the <u>default button</u> .
Dimmed button	The button is unavailable.
Ellipsis ()	The button opens another dialog box so you can provide more information.
Chevron (>>)	The button expands the current dialog box to show you additional options. Click 主 for an example of a chevron button.

To close a dialog box without completing any commands, choose Cancel.

E Keyboard Procedure

example

The Color dialog box in Control Panel has a chevron button that expands the Color dialog box to show more options:

Color <u>P</u>alette >>

Using Drop-down List Boxes

<u>Drop-down list boxes</u> are typically used in dialog boxes that are too small or too crowded to contain open list boxes. A drop-down list box appears initially as a rectangular box with the current choice selected in the box. The arrow in a square box to the right opens a list of available choices when you select it. If there are more choices than can fit in the drop-down list box, <u>scroll bars</u> are provided.

To open a drop-down list box and select an item:

- 1 Click the arrow at the right of the box to open the drop-down list box.
- 2 Click the Up or Down scroll arrow, or drag the scroll box to move to the item you want.
- 3 Click the item.
- E Keyboard Procedure

Using List Boxes

A list box shows a group of available choices. If the choices won't fit in the list box, scroll bars are included so you can move up and down through the list.

In some list boxes, you can select more than one item.

To select a single item from a list box:

- 1 Click the scroll arrows until your choice appears in the list box.
- 2 Click the item you want to select.

Or double-click the item to choose it and complete the selected command.

To change your selection, simply select a different item.

If you can select more than one item in a list box, the selection process works like a toggle switch, turning the selection on or off. You can select as many items as you want and also cancel any selections.

To select more than one item in a list box:

Click each item you want to select.

Click the item again to cancel a selection.

E Keyboard Procedure

Browsing Through the Directories List Box

In many dialog boxes, you can browse through the Directories list box to find the file you want to open, save, or add to a group.

To browse through the Directories list box:

1 Double-click the directory you want.

Double-clicking the two periods (..) shows the files and directories located one directory level closer to a disk's root directory. Double-clicking a directory name shows the files and subdirectories for that directory. Double-clicking a drive letter shows the files and directories for that disk drive.

2 Repeat step 1 until the Files list box shows the file you want to select.

Click 庄 for an example.

E Keyboard Procedure

-	File Open	
File <u>n</u> ame: : [V.*.MBI OK	Denesta dinasta
<u>F</u> iles:	Directories Cancel	
	[-3-] [-5-] [-c-]	

Suppose you want to select MEMO116.WRI. In the above example, you can choose the two periods [..] to move closer to the root directory:



memo 116

In the Files list, you can now select MEMO116.WRI.

[-b-] [-c-]

Selecting Option Buttons

<u>Option buttons</u> indicate mutually exclusive items. You can select only one option at a time. You can change an option by selecting a different button.

The selected option button contains a black dot. Unavailable options are dimmed.

To select an option button:



Click the option button.

Keyboard Procedure
Filling in Text Boxes

A text box is a rectangle into which you type information.

When you move to an empty text box, an <u>insertion point</u> often appears at the left side of the box. The text you type starts at the insertion point.

If the box already contains text when you move to it, all the text in the box is automatically selected and any text you type replaces it. Or you can erase the existing text by pressing DEL or BACKSPACE.

To select text in a text box:

Drag the pointer across the text you want to select.

Or double-click to select one word at a time.

- + +
- Related Procedures Keyboard Procedure

Procedures

Correcting Typing Mistakes Entering Text Selecting Text

Using Spin Boxes

A <u>spin box</u> shows one item in a range of possible choices. By clicking the up or down arrow to the right of the entry, you "spin" through the available choices until your choice appears.

To specify a setting in a spin box:

- Click the up or down arrow until the setting you want comes into view.
 - Or type the setting you want.
- E Keyboard Procedure

Closing Dialog Boxes

When you choose a command button, the dialog box closes and the command takes effect.

To close a dialog box without completing a command:

Click Cancel.

+

Or double-click the Control-menu box.

For dialog boxes that do not have Cancel buttons, choose the Close command from the Control menu. For dialog boxes that do not have Cancel buttons or Control menus, choose the appropriate button in the dialog box.

Starting Applications

If an application belongs to a Program Manager <u>group</u>, the easiest way to start it is to choose the program icon from the group window. If you included a document with the program item, the document will appear in the application workspace.

To start an application from a group:

- 1 Open the Program Manager window (if it is not already open) and open the group window that contains the application's program item icon.
- 2 Double-click the icon.

Starting Applications with the Run Command

The Run command is a handy way to start applications that you run only occasionally or have not yet added to a group. You can also use it to open a document at the same time you start an application. Unless the program file is in your current path, you need to know the exact <u>pathname</u> of the program file (and document) before you can start the application.

To start an application with the Run command:

- 1 Choose Run from the File menu in Program Manager.
- 2 Type the pathname of the program file, including the extension if there is one.
 - Click 主 for an example.

You can open a document at the same time you start most applications by typing a space followed by the document pathname after the program name.

Click 主 for an example.

- 3 Select the Run Minimized check box if you want the application to shrink to an icon as soon as it starts.
- 4 Click OK.

Starting Applications Using the DOS Prompt

Occasionally you might want to run a <u>non-Windows application</u>, such as an MS-DOS utility program, from Windows. You can run it by choosing the <u>DOS Prompt</u> icon in Program Manager's Main group window. That way, you can type MS-DOS commands just as if you were not running Windows.

Starting Applications from File Manager

You can also start applications and associated documents from File Manager.



Related Topics Keyboard Procedure

Concept

Start an Application or Command When Windows Starts

Option

Start-up Directory

Procedures

Adding Items to a Group Changing Item Properties Starting an Application Opening a Document

example

If WordPerfect is stored in the directory C:\WP50, you would type **c:\wp50\wp.exe** in the text box.

example

To open a document called FACTS in the MAY subdirectory of C:\WP50, you would type c:\wp50\ wp.exe may\facts in the text box.

Using the DOS Prompt

Occasionally, you might want to start an application or use MS-DOS commands from the DOS Prompt. You start the DOS Prompt in Program Manager as you would start an application.

The DOS Prompt icon is located in Program Manager's Main group, so you can get to MS-DOS without leaving Windows.

CAUTION: CHKDSK /f and other MS-DOS commands that might modify file allocation tables do not run properly from inside Windows. (CHKDSK without the /f switch runs fine.) Other commands that you should avoid running from inside Windows include file undelete utilities, and disk compaction or optimization utilities such as Norton's SD.EXE. If you need to run such commands, exit Windows first.

To start the DOS Prompt:

Double-click the DOS Prompt icon in Program Manager's Main group window.

When the MS-DOS command prompt appears, you can enter MS-DOS commands and start non-Windows applications.

+

+

To exit the DOS Prompt:

+ Type exit at the MS-DOS prompt and then press ENTER.

You can also leave MS-DOS running and switch to a Windows Application using your keyboard. **Keyboard Procedure**

+

hint

Press ALT+ENTER to switch a non-Windows application between running in a window and running full screen.

Switching Among Application Windows

Many times you'll have more than one <u>application window</u> open on your desktop. The window you are currently working in is called the <u>active window</u>. When you want to work with another application, you must select its window to make it active.

To switch among application windows:

+

Click anywhere in the inactive window you want to make active.

When you run several applications, some of their windows may not be visible. Whether their windows are visible or not, you can easily switch from one application to another by using <u>Task List</u>.

To use Task List in switching application windows:

- 1 Double-click anywhere on the <u>desktop</u> to display Task List. Or choose Switch To from an application window's <u>Control menu</u>.
- 2 Double-click the name of the application in the Task List box. Or select the name of the application and then choose Switch To.

When an application window appears as an icon, you can switch to the application and open the application window in one step with your mouse.

To switch to and open an application icon:

- Double-click the icon.
- Related Concept
- Keyboard Procedure

active window

Describes the window 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 on top of all other windows on the desktop, which means it might overlap non-active windows, partially or completely obscuring them. You can move part of the active application window beyond the borders of the desktop, thereby forcing some of the window's contents outside your view, but the active window cannot be covered by any other window.

The title bar of the active window changes color or intensity to differentiate it from other windows.

Inactive is the opposite of active and describes windows that are not selected.

Arranging Application Windows and Icons

You can use the Cascade and Tile commands from <u>Task List</u> to rearrange application windows so all open applications are visible on your desktop. The Cascade command overlaps the windows so that each <u>title bar</u> is visible. The Tile command arranges the open windows in smaller sizes to fit on the desktop.

To arrange application windows on your desktop:

- 1 Double-click anywhere on the <u>desktop</u> to display Task List.
 - Or choose Switch To from the application's Control menu.
- 2 Choose Cascade or Tile.

If you have a number of applications running as icons, and they are scattered across your desktop, you can rearrange them evenly across the bottom of your screen with the Arrange Icons command.

To rearrange application icons:

- 1 Double-click on the desktop to open Task List. Or choose Switch To from the application's Control menu.
- 2 Choose Arrange Icons.

+

Receiving Messages from Inactive Windows

When an inactive application has a status or error message for you, a beep sounds and the application flashes its <u>title bar</u> or icon.

To receive a status or error message:

Select the application window or icon.

The message appears as soon as you select the window or icon.

Quitting Applications

To quit a Windows application:

Choose Exit from the application's File menu.

Or choose Close from the <u>Control menu</u>.

Or double-click the <u>Control-menu box</u>.

If you have changed a document since you last saved it, Windows will prompt you to save the file.

To quit a non-Windows application:

E Choose the application's Exit command.

Or type exit and press ENTER if you are using the DOS Prompt.

When you exit a non-Windows application that is running full-screen, Windows usually returns you to the Windows desktop. However, you can change a setting in the <u>program information file (PIF)</u> if you want an inactive window to remain on your desktop after you exit.

Some applications display important information when exiting. The inactive window captures information from the application that was displayed as you exited.

Related Option

+

Switching Among Document Windows

With some applications, you can open more than one <u>document</u> at a time, each in its own window.

To switch among document windows in the application workspace:

+ Click anywhere in the document window that you want to switch to.

Or open the application's Window menu and choose the document you want.

Related Concept





Arranging Document Windows

In some applications, you can use the Cascade and Tile commands to rearrange document windows so that all of them are visible within the application workspace.

The Cascade command causes the windows to overlap so that each title bar is visible. The Tile command arranges the open windows in smaller sizes to fit within the application workspace.

To arrange document windows:



Choose Cascade or Tile from the application's Window menu.

Moving the Insertion Point

To move the insertion point:

+ Move the mouse to position the insertion point where you want it and click the left mouse button once.

Entering Text

To enter text in a new document:

Just start typing.

When you begin to enter text, an <u>insertion point</u> marks the place where the text you type will begin. Press ENTER or the SPACEBAR if you want to move the insertion point to a different place on the screen.

Pressing ENTER moves the insertion point to the next line. Pressing the SPACEBAR moves the insertion point one space to the right.

To enter text in an existing document:

Click where you want text to appear, and start typing.

Note that you can move the insertion point only to a place in the document where it's been before. Click for an example.

Keyboard Procedure

+

example

To type a report title 10 lines from the top of a new page and 20 spaces from the left margin, you would press ENTER 10 times and then press the SPACEBAR 20 times before you type the title. Anytime you have trouble moving the insertion point with the ARROW keys, try using the ENTER key or the SPACEBAR.

Correcting Typing Mistakes

Do this	То
Press BACKSPACE	Erase the character (or selected text) to the left of the insertion point.
Press DEL	Erase the character (or selected text) to the right of the insertion point.
Туре	Insert characters at the insertion point.

Selecting Text

You can make changes to blocks of text by <u>selecting</u> the text you want to change and then choosing one of the commands from the application's Edit menu.

To select text:

- 1 Point to the first character you want to select.
- 2 Drag the insertion point to the last character you want to select.
- 3 Release the mouse button.

If you want to cancel the selection, click again anywhere in the document.

In some applications you can double-click a single word to select it.

Editing Selected Text

Do this	То
Choose Cut	Delete the selected text and place it on the Clipboard.
Choose Copy	Place a copy of the selected text on the Clipboard.
Type the new text	Replace the selected text with new text.
Press DEL or BACKSPACE	Delete the selected text (without placing it on the Clipboard).
Choose Undo	Undo the previous editing operation.
Choose Paste E Keyboard Procedure	Insert text from the Clipboard into the active window.

You can edit selected text using the Edit menu in most applications.

Click a folder or topic title.	

+____Topics

-Windows Basics Keys-

Click a folder or topic title.

+____Topics

Dialog Box Keys Editing Keys Help Keys Menu Keys Movement Keys System Keys Text Selection Keys Window Keys

Dialog Box Keys

Use the following keys within dialog boxes:

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 the selection cursor from option to option within a group of options.	arrow keys
Or move the cursor left, right, up, or down within a list or text box.	
Move to the first item or character in a list or text box.	HOME
Move to the last item or character in a list or text box.	END
Scroll up or down in a list box, one window at a time.	PAGE UP OF PAGE DOWN
Open a drop-down list box.	ALT+DOWN ARROW
Select an item in a drop-down list box.	ALT+UP or DOWN ARROW
Select or cancel a selection in a list box.	SPACEBAR
Select or clear a check box.	
Extend the selection in a text box.	SHIFT+arrow key
Extend the selection to the first character in a text box.	SHIFT+HOME
Extend the selection to the last character in a text box.	SHIFT+END
Execute a command button.	ENTER
Or choose the selected item in a list box and execute the command.	
Close a dialog box without completing the command (same as the Cancel button).	ESC OF ALT+F4

Editing Keys

Use BACKSPACE and DEL to edit text in most places where you can type text.

To delete	Press	
The character to the left of the insertion point or selected text	BACKSPACE	
The character to the right of the insertion point or selected text	DEL	

Help Keys

Use the following keys to get Help:

То	Press
Display the Help Contents for the application. If the application has context-sensitive Help, pressing F1 displays Help on the selected command or dialog-box.	F1
If the Help window is already open, pressing F1 displays the Contents to Using Help.	
Change the pointer so you can choose the command, click the screen region, or press the key combination you want Help on.This feature is only available in some Windows applications.	SHIFT+F 1

Use the following keys in Help:

То	Press
Choose the Contents button.	С
Choose the Search button.	S
Choose the Back button.	В
Choose the History button.	Т
View the previous topic.	<
View the next topic.	>

Menu Keys

Use the following keys to select menus and choose commands:

То	Press
Select the first menu on the menu bar	ALT or F10
Choose the menu or menu item whose underlined letter matches the one you type	Letter key
Move among menus	LEFT OF RIGHT ARROW
Move among menu items	UP or DOWN ARROW
Choose the selected menu item	ENTER
Cancel the selected menu	ESC

Movement Keys

The following keys move the <u>insertion point</u> in text boxes and most other places where you can type text:

To move the insertion point	Press
Up one line	UP ARROW

Down one line	
Right one character	RIGHT
Left one character	LEFT ARROW

System Keys

You can use the following keys from any window, regardless of the application you are using:

То	Press
Switch to Task List.	CTRL+ESC
Switch to the next application window or minimized icon, including full-screen programs.	ALT+ESC
Switch to the next application window, restoring applications that are running as icons.	ALT+TAB
Copy an image of the screen contents onto the Clipboard.	PRINT SCREEN
Copy an image of the active window onto the Clipboard.	ALT+PRINT SCREEN
Close the active application window.	ALT+F4
Close the active document window.	CTRL+F4
Display the Help Contents for the application. (See <u>Help Keys</u> .)	F1

Text Selection Keys

You can use the following keys in Windows applications to select text in text boxes and most other places where you can type text:

To select	Press
Text one character at a time to the left or right. Or, if the character is already selected, these keys cancel the selection.	SHIFT+LEFT OF RIGHT ARROW
One line of text up or down. Or, if the line is already selected, these keys cancel the selection.	SHIFT+DOWN OF UP ARROW
Window Keys	
То	Press
Open the Control menu for an application window.	ALT+SPACEBAR

Open the Control menu for a document ALT+HYPHEN

window.

ALT+F4
ALT+ESC
ALT+TAB
ALT+ENTER
arrow keys



+	Working	with	Windows

+

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+

<u>Working with Windows</u> <u>Working with Dialog Boxes</u> <u>Working with Applications</u> <u>Working with Documents and Files</u> +

-Windows Basics Keyboard Procedures-

Click a folder or topic title.

- Selecting Windows or Icons Moving Windows, Icons, or Dialog Boxes Changing a Window's Size Minimizing a Window Maximizing a Window Restoring a Window or Icon to Its Previous Size Using Scroll Bars Closing Active Windows
- Working with Dialog Boxes
- Working with Applications
- Working with Documents and Files



- Working with Windows
 Working with Menus

Selecting and Canceling Menus Choosing Menu Commands Opening the Control Menu

- Working with Dialog Boxes
- Working with Applications
- Working with Documents and Files

-Windows Basics Keyboard Procedures—🤇

Click a folder or topic title.

+	——Working with Windows
+	——Working with Menus
+	Working with Dialog Boxes

+

+

Moving Within Dialog Boxes Selecting and Clearing Check Boxes Choosing Command Buttons Using Drop-down List Boxes Using List Boxes Browsing Through the Directories List Box Selecting Option Buttons Filling inText Boxes Using Spin Boxes Closing Dialog Boxes --Working with Applications --Working with Documents and Files

-Windows BasicsKeyboard Procedures—🍕

Click a folder or topic title.

Working with Windows
 Working with Menus
 Working with Dialog Boxes
 Working with Applications

Starting Applications
Using the DOS Prompt
Switching Among Application Windows
Arranging Application Windows and Icons
Receiving Messages from Inactive Windows
Ouitting Applications

Working with Documents and Files

Working with Windows

Working with Menus

Working with Dialog Boxes

Working with Applications

Working with Documents and Files

Switching Among Document Windows Arranging Document Windows Moving the Insertion Point Entering Text Correcting Typing Mistakes Selecting Text Editing Selected Text
Keyboard: Selecting Windows or Icons

In Windows, you first <u>select</u> a <u>window</u> or <u>icon</u> to indicate what you want to work on. Commands and actions affect the window or icon you selected. The window you're working on is the <u>active</u> window.

To select a window and make it active:

Press ALT+ESC to cycle through <u>application windows</u> until you reach the one you want. Or press CTRL+F6 to cycle through <u>document windows</u>.

The window is brought to the front; its <u>title bar</u> is highlighted, and its scroll bars and other elements become visible.

To select an icon:

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Press ALT+ESC to cycle through application icons until you reach the one you want. Or press CTRL+F6 to cycle through document icons.

The icon becomes highlighted to show that it is selected.

E Related Concepts

Concepts

<u>lcons</u> <u>The Windows</u>

Keyboard: Moving Windows, Icons, or Dialog Boxes

You can move application windows, document windows, icons, and any dialog box that has a title bar.

To move a window, icon, or dialog box:

- 1 <u>Select</u> the window, icon, or dialog box you want to move.
- 2 Open the Control menu.

To open the Control menu for an <u>application window</u>, press ALT and then the SPACEBAR. To open the Control menu for a <u>document window</u>, press ALT and then the HYPHEN (-) key.

- 3 Press м.
- 4 Use the <u>ARROW keys</u> to move the window, icon, or dialog box. An outline of the icon, window, or dialog box moves as you press the keys.
- 5 Press ENTER when the window, icon, or dialog box is positioned where you want it. To cancel the move, press ESC anytime before you press ENTER.
- House Procedure

Keyboard: Changing a Window's Size

You might want to change the size and shape of the <u>windows</u> open on your <u>desktop</u>. For example, to compare the contents of two documents, you could reduce the size of both windows until they fit side by side on the screen.

The minimum size for all windows is about 2 inches by 1 inch. In addition, some <u>application windows</u> have size limitations. For example, the Windows Setup window has a fixed size.

To change the size of a window:

- 1 <u>Select</u> the window you want to resize.
- 2 Open the Control menu.

To open the Control menu for an application window, press ALT and then the SPACEBAR.

To open the Control menu for a document window, press ALT and then the HYPHEN (-) key.

3 Press S.

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- 4 Use the <u>ARROW keys</u> to move the pointer to the border you want to move.
- 5 Use the ARROW keys to move the border.

If you want to change the size both horizontally and vertically, press two ARROW keys simultaneously to select a corner of the window. (UP ARROW+RIGHT ARROW, for example, selects the top-right corner of the window.)

Then press the RIGHT ARROW key to stretch the window to the right and the UP ARROW key to stretch the window toward the top of the desktop until the window is the size you want. An outline of the window border moves as you drag it. Press ENTER to complete the resizing.

- 6 Press ENTER when the window is the size you want.
 - To cancel the resizing, press ESC anytime before you press ENTER.
 - Mouse Procedure

Keyboard: Minimizing a Window

When you finish working with an application, but want it available for later use, you can reduce its window to an <u>icon</u>. When you shrink an application window to an icon with the <u>Minimize button</u>, the application is still running in memory, but its window does not take up space on your desktop. You can also minimize some document windows.

To minimize a window:

1 <u>Select</u> the window you want to minimize.

To minimize a document window that is maximized, you must first <u>restore it to its previous size</u> before you can minimize it.

2 Open the Control menu.

To open the Control menu for an <u>application window</u>, press ALT and then the SPACEBAR. To open the Control menu for a <u>document window</u>, press ALT and then the HYPHEN (-) key.

3 Press N.

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Related Concept

Keyboard: Maximizing a Window

You can maximize, or enlarge, most <u>application windows</u> to fill a large portion of the <u>desktop</u> or even the entire desktop.

You can maximize <u>document windows</u> to fill an entire application window except the menu bar space. You cannot maximize a document window beyond the boundaries of its application window.

To maximize a window:

- 1 <u>Select</u> the window you want to maximize.
- 2 Open the <u>Control menu</u>.

To open the Control menu for an <u>application window</u>, press ALT and then the SPACEBAR.

To open the Control menu for a document window, press ALT and then the HYPHEN (-) key.

3 Press X.

The window enlarges, and the Maximize button is replaced by the Restore button.

When you enlarge a document window, it covers all other document windows and icons, and its name appears after the application's name on the <u>title bar</u>.



Related Concept

Keyboard: Restoring a Window or Icon to Its Previous Size

Restoring a window or an icon returns it to the size and position it occupied before you changed it.

To restore a maximized window to its previous size:

- 1 Open the window's Control menu.
 - To open the Control menu for an <u>application window</u>, press ALT and then the SPACEBAR.
 - To open the Control menu for a document window, press ALT and then the HYPHEN (-) key.
- 2 Press R.

To restore an icon to a window:

- 1 Press ALT+ESC to select an application icon. Or press CTRL+F6 to select a document icon.
- 2 Open the Control menu.

To open the Control menu for an <u>application window</u>, press ALT and then the SPACEBAR. To open the Control menu for a <u>document window</u>, press ALT and then the HYPHEN (-) key.

3 Press R.

+

Related Concept

Keyboard: Using Scroll Bars

Some windows and dialog boxes have <u>scroll bars</u> you can use to view text that requires more than the available space.

To scroll		Press
Up or down one line		Press the ARROW key that points in the direction you want to scroll.
Up or down one window		PAGE UP OF PAGE DOWN.
Left or right one window		CTRL+PAGE UP or CTRL+PAGE DOWN.
To the top of the window		HOME (for a list box). CTRL+HOME (for a document).
To the end of the window		END (for a list box). CTRL+END (for a document).
+	Related Concept Mouse Procedure	

Keyboard: Closing Active Windows

When you finish working with an application window, document window, or dialog box, you can close it.

To close the active window:

Press ALT+F4.

If you have made changes to a document since last saving it, Windows prompts you to save the document before closing the window.

Keyboard: Selecting and Canceling Menus

Windows <u>commands</u> are listed on <u>menus</u>. Each <u>application</u> has its own menus, with a <u>Control menu</u> common to all applications. Other menus are represented by names in the <u>menu bar</u> at the top of each application window.

In Windows, you select a menu, and then choose a command from that menu. Choosing a command carries out an action.

To select a menu:

- 1 Press ALT (or F10) to select the menu bar.
- 2 Press the underlined letter in the menu name.

Or press the LEFT ARROW or the RIGHT ARROW key to select the menu you want. Then press ENTER. You can also select the Control menu of an application or document with the <u>ARROW keys</u>.

To cancel a menu:

Press ALT (or F10) to cancel the menu and move back to the application workspace.

Or press ESC to cancel the menu but remain on the menu bar so that you can select another menu.

Related Concept



Keyboard: Choosing Menu Commands

The items listed on <u>menus</u> are most often <u>commands</u>. But they can also be characteristics you assign to graphics or text (such as bold or centered), a list of open windows or files, or the names of cascading menus (menus that contain other menus). You use the same procedure, regardless of which items you choose.

To choose an item from a selected menu:

Press the underlined letter in the item name.

Or use the UP ARROW and DOWN ARROW keys to select the item you want. Then press ENTER.

Windows applications follow these conventions when listing items on a menu:

Menu convention	What it means	
Dimmed item	The command is not available. You might have to select something before you can use the command, or you might not be able to use the command with your application.	
Ellipsis ()	A dialog box appears when you choose the command, requesting information the application needs before carrying out the command.	
Check mark	The command is active. This convention is used for commands that can be turned on or off.	
Key combination	The key combination (such as SHIFT+F4) is a <u>shortcut</u> for this command. Use this key combination to <u>choose</u> the menu command without first opening the menu.	
Triangle (+)	The command leads to a cascading menu, which lists additional commands that are available.	
Click 🔃 to see an example of each convention. Mouse Procedure		

Keyboard: Opening the Control Menu

Application windows, document windows, application icons, group icons, and some dialog boxes have <u>Control menus</u>.

The procedure you use to open the Control menu varies slightly, depending on what you are working in.

To open the Control menu for an application window or application icon:

- 1 Press ALT+ESC until the application window or icon is selected.
- 2 Press ALT and then the SPACEBAR.

Press ALT to close the menu without choosing a menu item.

To open the Control menu for a non-Windows application running in 386 enhanced mode:

Press ALT+SPACEBAR.

Press ALT to close the menu without choosing a menu item.

Control menus for non-Windows applications that are running in 386 enhanced mode are available from the windows of windowed applications and from the icons of full-screen applications.

Note that the Control menu for a non-Windows application that you are running in 386 enhanced mode includes a cascading menu for the Edit command. You open the cascading menu by typing E.

To open the Control menu for a document window or document icon:

- 1 Press CTRL+F6 (or CTRL+TAB) until the document window or icon you want is selected.
- 2 Press ALT and then HYPHEN (-).

Press ALT to close the menu without choosing a menu item.

To open the Control menu for a dialog box:

Press ALT and then the SPACEBAR.

Press ALT to close the menu without choosing a menu item.

To open the Control menu for a non-Windows application running in standard or real mode:

1 Press ALT+ESC to switch from the running application back to Windows.

Non-Windows applications running in standard mode or real mode do not run in application windows, but occupy the entire screen. You can open their Control menus only by switching back to Windows, thereby reducing the non-Windows application to an icon. The Control menu is available from the application icon.

2 Press ALT and then the SPACEBAR.

Press ALT to close the menu without choosing a menu item.

hint

To find out which mode Windows is running in, open Program Manager and choose the About Program Manager command from the Help menu.

Keyboard: Moving Within Dialog Boxes

Often you need to move around within a <u>dialog box</u> to make several selections. The current option is marked by a <u>selection cursor</u> around the name of the option.

To move within a dialog box:

1 Press TAB to move forward (left to right and top to bottom) or SHIFT+TAB to move in the opposite direction.

Or hold down ALT and press the underlined letter in the option name or group name.

2 Within a group of options, use the <u>ARROW keys</u> to move from one option to another.



Related Topics Mouse Procedure Concept

Dialog Boxes

Procedure

Moving Windows, Icons, or Dialog Boxes

Keyboard: Selecting and Clearing Check Boxes

<u>Check boxes</u> indicate options you can switch on and off. You can select as many or as few check-box options as you want. When a check box is selected, it contains an X. When it is cleared, the box is empty. Names of options that are temporarily unavailable are dimmed.

To select check-box options:

- 1 Press TAB to move to the empty check box you want to select.
- 2 Press the SPACEBAR to enter an X.

Or, if the box has an underlined letter, hold down ALT and press the underlined letter for each check box you want to select.

To clear check-box options:

- 1 Press TAB to move to the check box you want to clear.
- 2 Press the SPACEBAR to clear the X.

Or, if the box has an underlined letter, hold down ALT and press the underlined letter for each check box you want to clear.

Keyboard: Choosing Command Buttons

Command buttons initiate an immediate action. One command button in each dialog box carries out the command you choose, using the information supplied in the dialog box. With other command buttons, you can cancel the command or choose from additional options.

To choose a command button:

1 Press TAB to select the command button you want.

A selection cursor around the button text marks the selected button.

2 Press the SPACEBAR (or ENTER) to choose the button.

Or hold down ALT and press the underlined letter in the button name (if the button has an underlined letter) to choose the button in one step.

Like menu commands, command buttons use the following conventions:

This convention	Means
Dark border	The button is currently selected or is the <u>default button</u> .
Dimmed button	The button is unavailable.
Ellipsis ()	The button opens another dialog box so you can provide more information.
Chevron (>>)	The button expands the current dialog box to show you additional options.
	Click 🔃 for an example of a chevron button.
You can close a dialo	og box without completing any commands by choosing ESC.
Mouse Proce	dure

example

The Color dialog box in Control Panel has a chevron button that expands the Color dialog box to show more options:

Keyboard: Using Drop-down List Boxes

<u>Drop-down list boxes</u> are typically used in dialog boxes that are too small or too crowded to contain open list boxes. A drop-down list box appears initially as a rectangular box with the current choice selected in the box. The arrow in a square box to the right opens into a list of available choices when you select it. If there are more choices than can fit in the drop-down list box, <u>scroll bars</u> are provided.

To open a drop-down list box and select an item:

- 1 Press ALT+DOWN ARROW to open the drop-down list box.
- 2 Use the UP ARROW or DOWN ARROW key to select the item you want.
- 3 Press ALT+UP ARROW or ALT+DOWN ARROW.
- Mouse Procedure

Keyboard: Using List Boxes

A <u>list box</u> shows a group of available choices. If the choices won't fit in the list box, <u>scroll bars</u> are included so you can move up and down through the list.

In some list boxes, you can select more than one item.

To select a single item from a list box:

1 Use the <u>ARROW keys</u> to scroll to the item you want.

Or press the first letter of the item you want.

The highlight moves to the first item that starts with that letter.

2 Press ENTER to choose the item and complete the selected command.

To change your selection, simply select a different item before choosing the command button.

If you can select more than one item in a list box, the selection process works like a toggle switch, turning the selection on or off. You can select as many items as you want and also cancel any selections.

To select more than one item in a list box:

- 1 Use the ARROW keys to move the highlight to the first item you want.
- 2 Press the SPACEBAR to select the item.

Press the SPACEBAR again to cancel the selection.

- 3 Repeat steps 1 and 2 until all the items you want are selected.
- Mouse Procedure

Keyboard: Browsing Through the Directories List Box

In many dialog boxes, you can browse through the Directories list box to find the file you want to open, save, or add to a group.

To browse through the Directories list box:

- 1 Press ALT+D.
- 2 Use the UP ARROW or DOWN ARROW key to select the directory you want and press ENTER.

Choosing the two periods (..) shows the files and directories located one directory level closer to a disk's root directory. Choosing a directory name shows the files and directories for a subdirectory. Choosing a drive letter shows the files and directories for a different disk drive.

Note that you cannot browse through the Directories list box in some Save As dialog boxes.

- 3 Repeat step 2 until the Files list box shows the file you want to select.
 - Click 主 for an example.
- Mouse Procedure

Keyboard: Selecting Option Buttons

<u>Option buttons</u> indicate mutually exclusive items. You can select only one option at a time. You can change a selection by selecting a different button.

The selected option button contains a black dot. Unavailable options are dimmed.

To select an option button:

- 1 Press TAB to move into the option group.
- 2 Use the <u>ARROW keys</u> to select the option button.

Or hold down ALT and press the underlined letter if the option name contains an underlined letter.

Keyboard: Filling in Text Boxes

A text box is a rectangle into which you type information.

When you move to an empty text box, an <u>insertion point</u> appears at the left side of the box. The text you type starts at the insertion point.

If the box already contains text when you move to it, all the text in the box is automatically selected and any text you type replaces it. Or you can erase the existing text by pressing DEL or BACKSPACE.

To select text in a text box:

- 1 Use the <u>ARROW keys</u> to move to the first character you want to select.
- 2 Hold down SHIFT and press an arrow key to extend the selection.
 - Press SHIFT+HOME to extend the selection to the first character in the box. Press SHIFT+END to extend the selection to the last character in the box.
- Mouse Procedure

Keyboard: Using Spin Boxes

To specify a setting in a spin box:



Type the setting you want. Mouse Procedure

Keyboard: Closing Dialog Boxes

When you choose a command button, the dialog box closes and the command takes effect.

To close a dialog box without completing a command:

Press ESC.

Or press ALT+F4 to choose Close from the Control menu.

Or choose the appropriate command button if the dialog box does not have a Cancel button or a Control menu.

Keyboard: Starting Applications

If an application belongs to a Program Manager <u>group</u>, the easiest way to start it is to choose the program icon from the group window. If you included a document with the program item, the document will appear in the application workspace.

To start an application from a group:

- 1 Press ALT+ESC until you select the Program Manager window or icon.
- 2 If Program Manager is an icon, press ALT and then the SPACEBAR to open the Control menu. Then press R to restore the Program Manager icon to a window.
- 3 Press CTRL+F6 until you select the group that contains the application and then press ENTER to open the group window.
- 4 Use the ARROW keys to select the icon of the application you want to start.
- 5 Press ENTER.

Starting Applications with the Run Command

The Run command is a handy way to start applications that you want to run only occasionally or have not yet added to a group. You can also open a document at the same time you start the application. Unless the program file is in your current path, you need to know the exact pathname of the program file (and document) before you can start the application.

To start an application with the Run command:

- 1 Press ALT and then F.
- 2 Press R.
- 3 Type the pathname of the program file, including the extension if there is one.
 - Click 主 for an example.

You can open a document at the same time you start most applications by typing a space and the document pathname after the program name.

- Click 庄 for an example.
- 4 Press TAB and then the SPACEBAR to select the Run Minimized check box if you want the application to shrink to an icon as soon as it starts.
- 5 Press ENTER.

Starting Applications Using the DOS Prompt

Occasionally you might want to run a <u>non-Windows application</u>, such as an MS-DOS utility program, from Windows. You can do so in the same way you run Windows applications. You can run it by choosing the <u>DOS Prompt</u> icon in the Program Manager's Main group window. That way, you can type MS-DOS commands just as if you were not running Windows.

Starting Applications from File Manager

You can also start applications and associated documents from File Manager.



Related Topics Mouse Procedure

Concept

How to Start an Application with Windows

Option

Start-up Directory

Procedures

Adding Items to a Group Changing Item Properties Starting an Application Opening a Document

example

If WordPerfect is stored in the directory C:\WP50, you would type **c:\wp50\wp.exe** in the text box.

example

To open a document called FACTS in the MAY subdirectory of C:\WP50, you would type c:\wp50\ wp.exe may\facts in the text box.

Keyboard: Using the DOS Prompt

Occasionally, you might want to start an application or use MS-DOS commands from the DOS Prompt. You start the DOS Prompt in Program Manager as you would start an application.

The DOS Prompt icon is located in the Program Manager's Main group, so you can get to MS-DOS without leaving Windows.

CAUTION: CHKDSK /f and other MS-DOS commands that might modify file allocation tables do not run properly from inside Windows. (CHKDSK without the /f switch runs fine.) Other commands that you should avoid running from inside Windows include file undelete utilities, and disk compaction or optimization utilities such as Norton's SD.EXE. If you need to run such commands, exit Windows first.

To start the DOS Prompt:

Use the ARROW keys to select the icon. Then press ENTER.

When the MS-DOS command prompt appears, you can enter MS-DOS commands and start non-Windows applications.

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To exit the DOS Prompt:

+ Type exit at the MS-DOS command prompt and then press ENTER.

You can also leave MS-DOS running and switch to a Windows Application using your keyboard. **+** Mouse Procedure

Keyboard: Switching Among Application Windows

Many times you'll have more than one <u>application window</u> open on your desktop. The window you are currently working in is called the <u>active window</u>. When you want to work with another application, you must select its window to make it active.

To switch among application windows:

+

Press ALT+ESC until the window you want is active.

When you run several applications, some of their windows may not be visible. Whether their windows are visible or not, you can easily switch from one application to another by using <u>Task List</u>.

To use Task List to switch to an application window:

- 1 Press CTRL+ESC to display Task List.
 - Or press ALT and then the SPACEBAR from an application. Then press W.
- 2 Press UP ARROW or DOWN ARROW key to select the application you want. Then press ENTER.

To switch to and open an application icon:

- 1 Press ALT+ESC until the icon you want is selected.
- 2 Press ALT and then the SPACEBAR to open the Control menu for the application icon.
- 3 Press ENTER to choose the Restore command from the Control menu.
- Related Concept
- Mouse Procedure

Keyboard: Arranging Application Windows and Icons

You can use the Cascade and Tile commands from <u>Task List</u> to rearrange application windows so all open applications are visible on your desktop. The Cascade command overlaps the windows so that each <u>title bar</u> is visible. The Tile command arranges the open windows in smaller sizes to fit on the desktop.

To arrange application windows on your desktop:

- 1 Press CTRL+ESC.
 - Or press ALT and then the SPACEBAR from an application. Then press W.
- 2 Press ALT+C to cascade the windows.

Or press ALT+T to tile the windows.

If you have a number of applications running as icons and they are scattered across your desktop, you can rearrange them evenly across the bottom of your screen with the Arrange Icons command.

To rearrange application icons:

1 Press CTRL+ESC.

Or press ALT and then the SPACEBAR from an application. Then press W.

2 Press ALT+A.

Keyboard: Receiving Messages from Inactive Windows

When an inactive application has a status or error message for you, a beep sounds and the application flashes its <u>title bar</u> or icon.

To receive a status or error message:

- E <u>Select</u> the application window or icon.
 - The message appears as soon as you select the window or icon.
- Mouse Procedure

Keyboard: Quitting Applications

To quit a Windows application:

Press ALT and then F from the application. Then press X.

Or press ALT and then the SPACEBAR from the the application. Then press c.

If you have changed a document since you last saved it, Windows will prompt you to save the file.

To quit a non-Windows application:

Choose the application's Exit command.

Or type exit if you are using the DOS Prompt.

When you exit a non-Windows application that is running full-screen, Windows usually returns you to the Windows desktop. However, you can change a setting in the <u>program information file (PIF)</u> if you want an inactive window to remain on your desktop after you exit.

Some applications display important information when exiting. The inactive window captures information from the application that was displayed as you exited.

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+

Related Option Mouse Procedure

Keyboard: Switching Among Document Windows

With some applications, you can open more than one <u>document</u> at a time, each in its own window.

To switch among document windows in the application workspace:

÷. Press CTRL+F6 until the document you want is selected.

Or press ALT and then the HYPHEN (-) key. Then press T to select the next document.

Or press ALT and then w. Then press the number representing the name of the document window you want to switch to.

- + **Related Concept** +
 - Mouse Procedure

Keyboard: Arranging Document Windows

In some applications, you can use the Cascade and Tile commands to rearrange document windows so that all of them are visible within the application workspace.

The Cascade command causes the windows to overlap so that each title bar is visible. The Tile command arranges the open windows in smaller sizes to fit within the application workspace.

To arrange document windows:



Choose Cascade (SHIFT+F5) or Tile (SHIFT+F4). Mouse Procedure
Keyboard: Moving the Insertion Point

To move the insertion point:

Use the following keys:

	Press	To move the insertion point
	UP ARROW	Up one line.
	DOWN ARROW	Down one line.
	RIGHT ARROW	Right one character.
	LEFT ARROW	Left one character.
+	Mouse Procedur	e

Keyboard: Entering Text

To enter text in a new document:

Just start typing.

Or press ENTER or the SPACEBAR if you want to move the insertion point to a different place on the page. Pressing ENTER moves the insertion point one space to the next line. Pressing the SPACEBAR moves the insertion point to the right.

To enter text in an existing document:

Move the insertion point where you want text to appear, and start typing.

Note that you can move the insertion point only to a place in the document where it's been before.

Click 主 for an example.



+

Related Keys Mouse Procedure

Keyboard: Correcting Typing Mistakes

Do this	То
Press BACKSPACE	Erase the character (or selected text) to the left of the insertion point.
Press DEL	Erase the character (or selected text) to the right of the insertion point.
Туре	Insert characters at the insertion point.

Keyboard: Selecting Text

You can make changes to blocks of text by selecting the text you want to change and then choosing one of the commands from the application's Edit menu.

To select text:

1 Move the insertion point to the immediate left of the first character you want to select.

2 Press SHIFT+LEFT ARROW or SHIFT+RIGHT ARROW to select one character at a time. Or press SHIFT+DOWN ARROW or SHIFT+UP ARROW to select a line at a time.

To cancel the selection, press an arrow key.



Related Keys Mouse Procedure

Keyboard: Editing Selected Text

Do this	То
Press SHIFT+DEL	Delete the selected text and place it on the Clipboard.
Press CTRL+INS	Place a copy of the selected text on the Clipboard.
Type the new text	Replace the selected text with new text.
Press DEL or BACKSPACE	Delete the selected text (without placing it on the Clipboard).
Press ALT+BACKSPACE	Undo the previous editing operation.
Press SHIFT+INS Mouse Procedure	Insert text from the Clipboard to the active window.

You can edit selected text using the Edit menu in most applications.



Microsoft Windows creates an electronic desktop where the things you work with (applications and documents) are represented graphically. When you start Windows, the desktop looks like this:





When you start an application, it appears in its own window. A window is used to do work and to display information. Since windows are the most basic element in Windows, they share many common parts.

🗩 🛛 🖉 🚽 🗖
File Edit Search Character Help
<u>۴</u>







A minir until yc windov	mized application windo ou are ready to use the a w, double-click its icon.	w appears as an icon on the desktop application again. To restore the
		Program Manager Fik Options: Window Help Main Main Fik Manager Control Panel Fik Manager Fik Manager Fik Manager Control Panel Fik Manager Fik Manager
	Double-click the Write icon	

Often a window contains more information than you can see at once. The window's scroll bars let you move the contents so that you can see the rest of what's in the window.



vluch of the worl of things you ca several menus.	< you do in wind n do with an ap To select a me	dows involves menus. Menus are l olication. Usually applications hav nu you click its name.	ists e
	Menu names	Write - (Untitled آناف Edit Search Onaracter Help إلا الله Click the Character menu.	



If completing a task requires information from you, the application will show a dialog box, which may include places to type text, items to choose, or buttons to click. The dialog box below illustrates the most typical dialog box "options" in Windows.

	2	Fonts		
	Eont Courier Modern MS Sans Serif MS Serif Script Symbol MS Sans Serif Eolor: Black	Style Bold Lalic Underline Strikeout	Size 10 Cancel Cancel Position Position Superscript Subscript	Click the OK button.
,	× .		3	





The window you click comes to the top and becomes active. To make a different window active, you click inside it. That is also the simplest way to switch between applications.







When you are ready to exit W command from Program Man	indows, you choose the Exit Windows ager's File menu.	
File menu commands	Program Manager THE Options: Window Help New Open Main Move Copy Delete Delete	
Click the Exit Windows command.	Esit Windows Bun Esit Windows Bun dowe Setup Read Me HyperGuide	

You have completed the Windows Tour. If you have not looked at the HyperGuide Tour yet, we suggest you do that now by clicking the choice below.



Click this button to go to the HyperGuide Tour.

Press ESC to exit the Windows Tour.



€	File Manager helps you organize and manage all the files and directories stored on your disks. You can also start applications and load documents from File Manager.
Ŧ	With Control Panel, you can change colors and fonts, set up printers and modems, connect to and disconnect from networks, change the appearance of your desktop, set up sound effects, change display modes, and control MIDI file playback.
Ē	Print Manager keeps track of all print requests you send to your printer from Windows and non-Windows applications to your printer.
+	The Clipboard acts as temporary storage for information you want to move or copy from one document to another.
Ē.	With DOS Prompt, you can type MS-DOS commands just as you would if you were not running Windows.
+	With Setup, you can add hardware and software to your Windows environment and modify information about some current settings.
₽	README.TXT is a text file containing documentation written after HyperGuide was produced and information reserved for advanced users. You can use Notepad to read README.TXT.
+	HyperGuide is your online documentation for learning how to use Windows. HyperGuide provides a comprehensive description of Windows, including explanations and

procedures for first-time users.