

Using EZ Setup

EZ Setup lets you customize the appearance of Windows (the Windows desktop, startup programs, icons, startup and close screens, and so on). Although you can perform some customization using the Control Panel, EZ Setup lets you change the appearance of these objects more fully and easily than in the Control Panel. EZ Setup provides these tabs of settings:

- **System**-The [System tab](#) lets you set Startup options that determine what Windows does during startup. The System tab also lets you decide whether to display logo screens (and what images should appear in these screens) when you start Windows and shut down or turn off your computer from within Windows.
- **Explorer**-The [Explorer tab](#) lets you specify settings that affect the Windows Explorer's menu speed, shortcuts, history and other settings.
- **Desktop**-The [Desktop tab](#) lets you add, hide and rename desktop icons. You can change a program's icon image and its properties. EZ Setup also lets you define the mouse sensitivity for double-clicking and dragging, whether to play audio and data CDs automatically, and whether to wrap shortcut names.
- **Run/Add/Remove**-The [Run/Add/Remove tab](#) lets you add, remove, edit, and set properties for programs that automatically run when you start Windows, and for programs that appear on the Start > Program menu.
- **Send To/New**-The [Send To/New tab](#) allows you add, remove, edit, and set properties for the commands that appear on the File > Send To menu in My Computer. Commands on the Send To menu specify locations where you want to send the files you've selected in a drive or volume window that is open inside My Computer. For example, you might add an application or a folder to the Send To menu.
- **Context Menu**-The [Context Menu tab](#) lets you customize the commands that appear in the Windows Context menu. This is the menu that appears when you right-click objects on the desktop or open areas or windows.
- **Privacy and Security** tab enables you disable Boot-time keys (e.g., F4, F5 and shift F6); disable registry editing; show, hide or clear at logon, History list containing information such as documents you worked on and searches you made via your PC's browser.
- **MS Office** (only if Microsoft Office 2000 is installed) tab enables you to add or remove open file dialog shortcuts for easy access to your most commonly-used files.

The procedures you can perform in EZ Setup are described in these help topics:

[Specifying Startup Options or Logos](#)

[Specifying Menu Speed, Settings, Shortcuts and History](#)

[Specifying Windows Desktop Icons and Behavior](#)

[Specifying Startup Programs and Programs in the Program Menu](#)

[Specifying Send To Menu Commands](#)

Specifying Startup Options or Logos

The System tab allows you to configure your system by setting a variety of Startup options that customize how Windows behaves when it starts. The System tab also lets you decide whether to display logo screens (and what images should appear in these screens) when you start Windows and shut down or turn off your computer in Windows.

To specify startup options or logos:

1. Start EZ Setup by doing one of the following:
 - Click the Start button and choose the Program > **McAfee Utilities** > EZ Setup command.
 - Open the **McAfee Utilities** folder and double-click the EZ Setup icon from the Windows Explorer window.
 - The EZ Setup window appears with the System tab at the front.
2. Select the check boxes for the start up options you want to use and enter or select the number of seconds for the boot delay.
3. Select the check boxes for the logo screens you want to see during a Windows session.
4. Select a logo screen from the drop-down list box and do any of the following:
 - Click the Change button to select a different image for the selected logo screen.
 - A standard Open dialog box appears where you can select a different file to use for the selected logo screen.
 - Click the Edit button to edit the logo image you are viewing in a Microsoft Paint window.
 - Click the Default button to switch back to the default logo screen for the logo selected in the drop-down list box.
5. Do one of the following:
 - Click the Apply button when you finish selecting System options.
 - Click the OK button if you are done specifying EZ Setup options. Or click a different tab to bring it to the front and select those setup options before clicking OK.
 - After you click OK, EZ Setup closes and returns you to the desktop.

Specifying Menu Speed, Settings, Shortcuts and History

The Explorer tab lets you customize the Windows Explorer's behavior and appearance. For example, you can decide whether to show the Tip of the Day, select what kind of graphic shortcut indicator to add to shortcut icons, and whether to clear the recent documents opened history information.

To specify menu speed, settings, shortcuts and history:

1. Start EZ Setup by doing one of the following:
 - Click the Start button and choose the Program > **McAfee Utilities** > EZ Setup command.
 - Open the **McAfee Utilities** folder and double-click the EZ Setup icon from the Windows Explorer window.
 - The EZ Setup window appears.
2. Click the Explorer tab to bring it to the front.
3. Drag the Menu Speed slider left to increase the menu speed or right to decrease it.
4. Select the check boxes for the Explorer options you want to use.
5. Select a shortcut arrow type from the drop-down list box.
 - You can click the Shortcut icon button to display the Change Icon dialog box where you can select a different Shortcut icon by filename.
6. Select the kinds of history information you want EZ Setup to clear for you when you start Windows.
 - Or you can click the Clear Now button beside the kind of history information you want to clear immediately.
7. Do one of the following:
 - Click the Apply button when you finish specifying Explorer options.
 - Click the OK button if you are done specifying EZ Setup options. Or click a different tab to bring it to the front and select those setup options before clicking OK.
 - After you click OK, EZ Setup closes and returns you to the desktop.

Specifying Windows Desktop Icons and Behavior

The Desktop tab lets you add, hide, and rename desktop icons. You can change a program's icon and properties. EZ Setup also lets you select the mouse sensitivity for double-clicking and dragging, and whether to play audio and data CDs automatically or wrap shortcut names.

To specify Windows desktop icons and behavior:

1. Start EZ Setup by doing one of the following:
 - Click the Start button and choose the Program > **McAfee Utilities** > EZ Setup command.
 - Open the **McAfee Utilities** folder and double-click the EZ Setup icon from the Windows Explorer window.
 - The EZ Setup window appears.
2. Click the Desktop tab to bring it to the front.
3. Select the check boxes beside the icons you want to see on your desktop.
4. Click the Add Desktop Shortcut button if you want to add a program (an executable EXE file) or a batch file (BAT) as a desktop shortcut.
5. Enter or select a number for the mouse's double-click and drag sensitivity.
6. Check the mouse sensitivity to see if it suits you by dragging or double-clicking the test icon at the right of the Mouse Sensitivity section of the Desktop tab.
7. Select the auto play options you want to use for playing CD-ROM discs.
8. Do one of the following:
 - Click the Apply button when you finish specifying Desktop options.
 - Click the OK button if you are done specifying EZ Setup options. Or click a different tab to bring it to the front and select those setup options before clicking OK.
 - After you click OK, EZ Setup closes and returns you to the desktop.

Specifying Startup Programs and Programs in the Programs Menu

The Run/Add/Remove tab lets you add, remove, edit, and specify properties for programs that automatically run when you start Windows, and for programs that appear on the Start > Program menu.

To select Run/Add/Remove options:

1. Start EZ Setup by doing one of the following:
 - Click the Start button and choose the Program > **McAfee Utilities** > EZ Setup command.
 - Open the **McAfee Utilities** folder and double-click the EZ Setup icon from the Windows Explorer window.
 - The EZ Setup window appears.
 2. Click the Run/Add/Remove tab to bring it to the front.
 3. Do any of the following to work with the programs that start automatically at Windows start-up:
 - Click the Add button below the Programs That Start Automatically at Windows Startup list to add an application to this list. EZ Setup displays a standard Windows Open dialog box where you can locate a filename to add.
 - Select a program in the Programs That Start Automatically at Windows Startup list and click the Remove button to remove the selected program from the list.
 - Select a program in the Programs That Start Automatically at Windows Startup list and click the Edit button to edit the name of the program.
 - Select a program in the Programs That Start Automatically at Windows Startup list and click the Properties button to view the Properties sheet for the selected program.
 4. Do any of the following to work with programs that appear in the Programs menu:
 - Click the Add button below the Add/Remove Program Menu list to add an application to this list. The Add/Remove Program dialog box appears.
 - Select a program in the Add/Remove Program Menu list and click the Remove button to remove the selected program from the list and from the Program menu.
 - Select a program in the Add/Remove Program Menu list and click the Edit button to open the Add/Remove Program dialog box with the display string and command line for the selected program. Change this information and click OK.
 5. Do one of the following:
 - Click the Apply button when you finish specifying Run/Add/Remove options.
 - Click the OK button if you are done specifying EZ Setup options. Or click a different tab to bring it to the front and select those setup options before clicking OK.
- After you click OK, EZ Setup closes and returns you to the desktop.

Specifying Send To Menu Commands

The Send To/New tab lets you add, remove, edit, and select properties for the commands that appear on the File > Send To menu available in Windows Explorer or My Computer. The Send To menu is also available in the context-sensitive pop-up menu that appears when you Right-click the mouse button, such as when you point to an icon in My Computer.

Commands on the Send To menu specify locations where you want to send the files you've selected in a drive or volume window that is open inside My Computer or Windows Explorer. For example, you might add an application or a folder to the Send To menu.

To specify Send To menu commands:

1. Start EZ Setup by doing one of the following:
 - Click the Start button and choose the Program > **McAfee Utilities** > EZ Setup command.
 - Open the **McAfee Utilities** folder and double-click the EZ Setup icon from the Windows Explorer window.
 - The EZ Setup window appears.
2. Click the Send To/New tab to bring it to the front.
3. Specify the locations you want to add, remove or edit in the Send To/New tab.
 - You can also click the Properties button to open the Properties sheet for the selected location (file, folder, drive, and so on) in the Send To Location list.
4. Do one of the following:
 - Click the Apply button when you finish specifying Desktop options.
 - Click the OK button if you are done specifying EZ Setup options. Or click a different tab to bring it to the front and select those setup options before clicking OK.
 - After you click OK, EZ Setup closes and returns you to the desktop.

EZ Setup Window

The EZ Setup window contains several tabs of options that let you customize the behavior and appearance of Windows:

- **System**-The [System tab](#) lets you set Startup options that determine what Windows does during startup. The System tab also lets you decide whether to display logo screens (and what images should appear in these screens) when you start Windows and shut down or turn off your computer from within Windows.
- **Explorer**-The [Explorer tab](#) lets you specify settings that affect the Windows Explorer's menu speed, shortcuts, history and other settings.
- **Desktop**-The [Desktop tab](#) lets you add, hide and rename desktop icons. You can change a program's icon image and its properties. EZ Setup also lets you define the mouse sensitivity for double-clicking and dragging, whether to play audio and data CDs automatically, and whether to wrap shortcut names.
- **Run/Add/Remove**-The [Run/Add/Remove tab](#) lets you add, remove, edit, and set properties for programs that automatically run when you start Windows, and for programs that appear on the Start > Program menu.
- **Send To/New**-The [Send To/New tab](#) allows you add, remove, edit, and set properties for the commands that appear on the File > Send To menu in My Computer. Commands on the Send To menu specify locations where you want to send the files you've selected in a drive or volume window that is open inside My Computer. For example, you might add an application or a folder to the Send To menu.
- **Context Menu**-The [Context Menu tab](#) lets you customize the commands that appear in the Windows Context menu. This is the menu that appears when you right-click objects on the desktop or open areas or windows.
- **Privacy and Security** tab enables you disable Boot-time keys (e.g., F4, F5 and shift F6); disable registry editing; show, hide or clear at logon, History list containing information such as documents you worked on and searches you made via your PC's browser.
- **MS Office** (only if Microsoft Office 2000 is installed) tab enables you to add or remove open file dialog shortcuts for easy access to your most commonly-used files.

Tip Click a tab to bring it to the front so you can select the options it contains.

System Tab

This tab contains the following options:

- **Boot to Windows**
Select this check box to start Windows when you start your computer. When you deselect this check box and restart your computer, it boots up and takes you to the DOS prompt (usually the C:\> prompt). To start Windows from this prompt, type WIN and press Enter.
- **Boot delay in seconds**
Select or enter the number of seconds of delay you want when booting the PC. You can increase the boot delay to have extra time for pressing the Windows startup hot keys.
- **Safe mode warning message**
Select this check box if you want Windows to display a warning message if it starts in Safe mode. If Windows cannot start normally for some reason, it starts in Safe mode, so you can make changes to eliminate the problem.
- **Enable network in safe mode**
Select this check box if you want to start Windows in Safe mode including network capabilities.
- **Enable fail safe mode**
Tells Windows to boot in Safe mode, even if everything appears to be OK.
- **Always load DoubleSpace drivers**
Most likely you should keep this check box selected. The DoubleSpace driver is the file named Dblspace.bin. It is used to access drives compressed using DoubleSpace. DoubleSpace is a disk compression method that creates a compressed drive, which is actually a compressed volume file, or CVF, (usually named DBLSPACE.001) that is stored on your hard drive.
- **Always load DriveSpace drivers**
Most likely you should keep this check box in its default state. The DriveSpace driver is a file named Drvspace.bin. It is used to access drives compressed using DriveSpace. DriveSpace is a Windows disk compression method that creates a compressed drive which is a compressed volume file (usually named DRVSPACE.001) that is stored on the hard drive.
- **Enable non-native drive double buffering**
This option is set automatically by Windows and generally should not be changed. Select this check box to avoid lock-ups or errors if your PC has an ISA controller card and a DOS driver, and if you have over 16 MB of RAM in your PC. If your PC does not have an ISA disk controller card or if you use an ISA disk controller card, but have 16 MB or less of RAM, keep this check box deselected because the double buffering could slow down the performance of your computer and it provides no benefit below the 16 MB threshold for ISA cards.
- **Enable boot-time hot keys**
Select this check box if you want to be able to use the Windows startup keys (also called shortcut or hot keys). Press these hot keys after the Windows starting message appears and before the Windows startup screen appears.
- **Name of Disk Scanner**
Choose Disk Minder or Scan Disk to pick which one you want Windows to start if it encounters a problem with a disk.
- **Display startup logo**
Select this check box to have the Windows Startup logo to appear whenever you start Windows.
- **Display shutdown logo**
Select this check box to have the Windows Shutdown logo to appear whenever you restart the PC in Windows.
- **Display turnoff logo**
Select this check box to have the Windows Turnoff logo to appear whenever you turn off the computer after shutting down Windows.
- **Screen**
Choose a logo screen name and the screen preview shows the current image for that logo screen. Then you can use the Change, Edit or Default buttons to change, edit, or reset the default image for the chosen logo screen, respectively.
- **Change**
Select a screen in the pop-up menu. Then click Change to select a bitmap image (.BMP) or logo file (.SYS) to use for it. Note, Start-up images must be 320 x 400 color images--several are provided in the McAfee Utilities directory.

- **Edit**
Select a screen in the pop-up menu. Then click Edit to edit the image displayed in the logo preview. EZ Setup opens the image in a standard Paint window.
- **Default**
Select a screen in the pop-up menu. Then click Default to use the default bitmap image for this screen.

Explorer Tab

This tab contains the following options:

- **Menu speed**
Drag the slider left to make menus appear faster, or right to make them appear more slowly.
- **Settings**
Select the check boxes for these self-explanatory settings.
- **Shortcuts**
Select a shortcut indicator to use to visually distinguish shortcut icons from regular file icons. The shortcut indicator is part of all shortcut icons on your desktop. The default shortcut indicator is a small curved arrow inside an outlined white box.

You can also click the Folder button to select any icon to use as the custom shortcut icon. Icons use the .ICO file type. After you select an icon, EZ Setup displays it in the Explorer tab as the currently specified Shortcut Icon.

Tip You can modify any shortcut icon supplied with EZ Setup using Discover to extract the icon to a file. Click the Software tab, the Advanced button, and the App Resources icon. Then select EZ Setup in the Modules list, select the icon in the Resources list at the lower left, and click the Extract Resources to File button.

- **Prefix "Shortcut to" to Shortcut File**
Select this check box if you want Windows to add the words "Shortcut to" in front of the name of the shortcut files you create. A *shortcut file* is like a roadmap to an original program or document file. Using shortcut files reduces the amount of storage space required for storing these files, while letting you place an iconic roadmap to them at any location (on any drive, in any folder, or on the desktop).
- **History**
Select the Clear at Logon check boxes for the history information you want Windows to clear when it starts. History information includes the run history of programs most recently run, the history of documents most recently opened, the last find files settings, and the last find computer settings. You can also click Clear Now to instantly clear the corresponding history information.
- **Clear Now**
Click the Clear Now button beside the kind of history information you want to clear immediately.

Desktop Tab

This tab contains the following options:

- **Desktop Icons**

This list displays all the desktop icons found on your system. The ones that are set to appear on the Windows desktop have a check mark beside them. You can select the desktop icons that you want to appear on your desktop by placing a check mark beside them. Or you can deselect desktop icons so that their icons do not appear on the desktop.

The icons on your desktop represent application files, document files, folders, drives and so on. When you double-click a desktop icon, you start the indicated application or open the document in the application that is associated with it (most often the application that created the document).

EZ Setup lets you easily select what icons should appear on your desktop. For example, by default the My Briefcase icon appears on the Windows desktop. You can deselect its check box here to remove it from your desktop. You can still access My Briefcase by double-clicking its icon where it is stored inside the Desktop folder in the Windows folder in Windows Explorer or My Computer. Icons that appear on the desktop also are available when you view information on your hard drives using the Windows Explorer or by opening drives and folders inside My Computer.

- **Add**

Click Add to select a file whose icon you want to add to the Windows desktop.

- **Hide/Show**

Click Hide/Show to hide or show the selected desktop icons on the Windows desktop.

- **Rename**

Click Rename to change the name of the selected desktop icon.

- **Change Icon**

Click Change Icon to change the image used for the selected desktop icon.

- **Properties**

Click Properties to display the Properties sheet for the selected entry in the Desktop Icons list. This gives you the same information you see after selecting an icon in My Computer or Windows Explorer and choosing Properties from the File menu.

- **Double Click**

Enter, or click the Up/Down arrow buttons to select, the hot zone size in pixels for double-clicking. The hot zone is the number of pixels you can move the mouse when double-clicking before Windows assumes you are not clicking twice. This is not the speed of the double-click, which you set in the Mouse control panel. Rather, this is the distance you can move the mouse in between the two clicks. The higher the number, the larger the hot zone--and more movement is allowed during the double-click.

- **Drag**

Enter, or click the Up/Down arrow buttons to select a number that indicates the mouse sensitivity for dragging objects on the desktop. The higher the number, the longer the pause before an object begins following the Arrow pointer when you drag. This lets you move the mouse a bit when selecting an object before Windows interprets your action as dragging that object. The lower the number, the faster and more closely an object follows the Arrow pointer when you begin dragging it.

Tip If the Drag mouse sensitivity number is set very low, and you slightly move the mouse while clicking an application icon (in Windows Explorer or My computer) to select that icon, Windows will interpret your action as dragging instead of selecting the icon. If this happens, a shortcut icon for the application is created instead of the icon being highlighted, which indicates it is selected.

- **Auto Play**

Select the check boxes to have Windows to begin playing audio or data CDs automatically when you insert them into your CD drive while the desktop is active.

Run/Add/Remove Tab

This tab contains the following options:

- **Programs Run Automatically at Windows Startup**

This list displays all the programs that are currently set up to run when you start a Windows session. You can add or remove programs from this list, and get information about the selected program in the list.

- **Add**

Click Add to add a new program to run automatically at Windows startup. The next time you start Windows, the program starts automatically. These programs will be added to your StartUp folder.

Tip Hold down the **Shift** key immediately after the Windows Starting screen appears (or after logging in) and Windows will skip loading the files in your StartUp folder.

- **Remove**

Select a program and click Remove to remove it from the Windows Startup folder. The next time you start Windows, the program no longer starts automatically.

- **Edit**

Select a program and click Edit to edit the program's filename or path.

- **Properties**

Select a program and click Properties to view its Properties sheet. The Properties sheet shows where the program is beginning from: Registry or StartUp.

- **Add/Remove Program Menu**

When you load a program into Windows, the program can register its Setup or Install program with the Add/Remove Programs control panel. This section shows you which programs are registered in this way. When you run Control Panel and open the Add/Remove Programs control panel, you will see the same list.

If you double-click an item in this list, it runs the associated Setup program, which generally allows you to add or remove features of the program. For example, the Microsoft Office Add/Remove option would allow you to remove Office components, or add ones that you originally did not install. This EZ Setup screen lets you view or modify all registered install/deinstall utilities.

- **Add**

Click the Add button below the Add/Remove Program Menu list to add an application to this list.

The Add/Remove Program dialog box appears where you can enter a display string (the program title that appears in the Program menu) and a command line (the path to the location of the program file).

You can also click the Browse button to select the program file rather than entering the path yourself. If you click Browse, EZ Setup displays a standard Windows Open dialog box where you can locate a filename to add. By default, EZ Setup displays executable (EXE) files. However, you can select to display all file types (*.*) if you prefer.

After you add a program, click Apply and then OK when you finish selecting EZ Setup options. The next time you start a Windows session, the program you added will appear in the Start > Program menu.

- **Remove**

Select a program in the Add/Remove Program Menu list and click the Remove button to remove the selected program from the list and from the Program menu.

After you remove a program, click Apply and then OK when you finish selecting EZ Setup options. The next time you start a Windows session, the program you removed will no longer appear in the Start > Program menu.

- **Edit**

Select a program in the Add/Remove Program Menu list and click the Edit button to open the Add/Remove Program dialog box with the display string and command line for the selected program. Change this information and click OK.

After you edit a program, click Apply and then OK when you finish selecting EZ Setup options. The next time you start a Windows session, the program changes you made will be reflected in the program title (the display string) in the Start > Program menu and in the path used to locate the program (the command line).

- **Properties**

Select a program in the list and click the Properties button to view the program's Properties sheet.

Add/Remove Program Dialog Box

This dialog box contains the following options:

- **Display String**
The Display String text box lets you name the program as you want it to appear in the Program menu.
- **Command Line**
The Command Line text box lets you enter the path to the location of the program file you are adding or editing.
- **OK**
Click OK to accept the display string and command line and return to the Run/Add/Remove tab in the EZ Setup window.
- **Cancel**
Click Cancel to close this dialog box without adding a program or editing its display string or command line. EZ Setup returns you to the Run/Add/Remove tab in the EZ Setup window.
- **Browse**
Click the Browse button to select the program file rather than entering the path yourself.

When you click Browse, EZ Setup displays a standard Windows Open dialog box where you can locate a filename to add. By default, EZ Setup displays executable (EXE) files. However, you can select to display all file types (*.*) if you prefer.

Send To/New Tab

This tab contains the following options:

- **Send To Locations**
Select a program file, document file, folder, shortcut, and so on in this list of items you can add to the Send To menu, edit, or remove from the Send To menu. You can also select an item to view its Properties sheet.
- **Add**
Click Add to add a new program to the File > Send To menu, available in a drive window you open in My Computer.
- **Remove**
Select a program and click Remove to remove it from the File > Send To menu.
- **Edit**
Select a program and click Edit to change the program's name in the Send To Locations list, which is how the corresponding command will appear in the Send To menu.
- **Properties**
Select a program and click Properties to view its Properties sheet.

Context Menu Tab

This tab contains the following options:

- **File List**
Click the plus signs to open a folder and view or select its contents.
- **Display Info**
Select whether to display the files in the list by file type or context menu handler.
- **Properties**
Click the Properties button to examine the Properties for the selected file, if available.
- **Disable**
Click Disable to disable the selected file in the list, which takes the corresponding command out of the Context menu unless you decide to enable it later.
- **Remove**
Click Remove to permanently remove the selected file from the list, which permanently removes it the corresponding command from the Context menu. Unless you are positive you will never want the command in the Context menu, it is simpler to use the Disable command.

Window Patterns Tab

This tab contains the following options:

- **Enable McAfee Utilities Window Patterns**
Select this check box to turn on the Window Patterns feature which lets you use a pattern for Wizard windows and dialog boxes in Windows.
- **Select Applications to Customize**
Select to customize the window pattern for applications or Windows Explorer. Then click the Change Pattern button to select the bitmap for the application selected in this drop-down list box.
- **Change Pattern**
Shows a standard Open dialog box where you can select the bitmap (BMP file) to use for the window background pattern.
- **Hide This Page (Use McAfee Utilities Central to re-enable)**
Select this check box if you want to hide this tab. [You can choose to show it again using McAfee Utilities Central.](#)

Icon Animation Tab

This tab contains the following options:

- **Animation Theme**

Select an animation theme that you want to work with or select to disable animation. For the selected animation theme, you can save it using a different name or delete it (**only delete animations you've created in case you want to use the originals provided with McAfee Utilities later**). You can also select which events should use the currently selected animation theme and specify options including changing the animation, sound or speed.
- **Save As**

Click the Save As button to create a copy of the currently selected animation theme using a different name. It is a good idea to do this so that the original themes stay intact.
- **Delete**

Click the Delete button to delete the currently selected animation theme. Most likely you should only delete the custom animation themes you've created.
- **Event List**

Select the events that should use the currently selected animation theme.
- **Show Tray Icon**

Select the Show Tray Icon check box if you want the event to place an icon in the Windows icon tray.
- **Options**

Select to disable; change the animation, sound, or speed; or examine the properties for the currently selected animation theme.

Address Space

The sum total of all possible memory addresses available at a given time. This is 4 GB (gigabytes) on a 386 or later PC in protected mode.

Benchmarks

A benchmark is a standardized task that tests various devices for measurements, such as speed.

BIOS

The BIOS (or Basic Input/Output System) contains buffers for sending information from an application to the hardware device, such as a printer, where the information should go.

Buffers

A buffer is a temporary storage location for information being sent or received.

Bytes

A byte is eight bits of information composed of zeros and ones, one of which may be a parity bit. Most character sets, such as ASCII, use one byte to represent each character (letter, number, or special symbol).

Cache

A cache is part of the computer's memory used to temporarily store recently accessed information. A cache is designed on the premise that recently used information may be needed again soon. Keeping information available in cache reduces the time it takes for an application to obtain the information again.

Cluster

A cluster is a unit of storage allocation usually consisting of four or more 512-byte sectors.

Conventional Memory

Conventional memory is the first 640 K (kilobytes) of RAM (random access memory).

CPU (Central Processing Unit)

The “brain” of your computer. This is main computer chip that controls all activity that takes place on a computer.

Diagnostics

Diagnostics are tests run to detect faults in a computer system. Diagnostics tests are run to detect faults before they become serious problems so the faults can be corrected.

Directories

Directories are locations within a volume on a drive where you can store files or subdirectories. In Windows, directories are equivalent to folders that appear on the desktop in a drive window.

Discardable Memory

Discardable memory is memory used by an application that it has marked as discardable. Windows can reallocate the discardable memory to a different application if it needs to.

DLLs (Dynamic Link Libraries)

A DLL is an executable code module that can be loaded on demand and linked at run time. DLLs can be shared among multiple applications and independently updated, transparent to the applications. DLLs can also be unloaded when they are no longer needed.

DMA (Direct Memory Access)

DMA is a fast method of moving information from a storage device or LAN interface card directly to RAM which speeds processing time. DMA is direct memory access by a peripheral device that by-passes the CPU to save time.

Expanded Memory

DOS running on the Intel 80286, 80386, or 80486 family of computers can only address one megabyte of memory at one time. Expanded memory is the memory located between the base memory (either 512 K or 640 K) and one megabyte. Expanded memory is reserved by DOS for housekeeping tasks, such as managing information that appears on the screen.

Extended Memory

Memory above one megabyte in 80286 and higher PCs. Extended memory can be used for RAM disks, disk caches, or Windows, but it requires the CPU to run in a special mode (protected mode or virtual real mode).

FAT (File Allocation Table)

The FAT is an index to the location where all the information is stored on a floppy disk or hard drive. The FAT is extremely important because the system uses it to store and retrieve files containing information.

GDT (General Description Table)

The GDT is a table that is basic to the operation of protected mode. This table contains data structures (descriptors) that describe various regions of memory and how they may be accessed. Windows uses the GDT for system devices. *See LDT.*

Global Heap

The Global Heap is the general pool of memory available to Windows applications.

GPF (General Protection Fault)

An error condition caused by an application when it attempts to perform an operation not allowed by the operating system. Windows uses GPFs to determine and control the state of the currently executing application. GPFs that are unexpected by Windows cause a system error message to appear.

HMA (High Memory Area)

The HMA is the first 64 K of extended memory. If you use DOS 5.0, you can save memory by loading DOS into the HMA. Do this by adding the DOS=HIGH setting to your CONFIG.SYS file and restarting your PC.

Interrupt

A temporary suspension of a process caused by an event outside that process. More specifically, an interrupt is a signal or call to a specific routine. Interrupts allow peripheral devices, such as printers or modems, to send a call to the CPU requesting attention.

I/O (Input/Output) Device

An I/O device is any piece of computer hardware that can exchange information with the CPU. Examples of I/O devices include network cards, printers, speakers or other sound devices, or devices connected to the serial or parallel ports of your PC such as external modems.

Kernel

The Kernel is the part of a computer operating system that performs basic functions such as switching between tasks.

LDT (Local Descriptor Table)

The LDT is a secondary data structure table that contains additional information about various regions of memory and how they can be accessed. Windows uses the LDT for programs.

Linear Memory

Linear memory is the currently defined address space of the system that Windows uses to allocate memory to Windows applications.

Local Heap

The Local Heap is a region of memory allocated for local use by an application.

Locked Memory

Locked memory is memory used by an application that cannot be relocated or discarded by Windows.

Mapping

Mapping is the process of assigning physical memory (RAM) to a particular linear address range.

Mode Switch

A mode switch is a transition made by the CPU when changing from one mode of operation to another. For example, switching from real or protected mode, or a transition between different levels of protection. See *Ring 0, 1, 2, 3*.

Modules

A module is a device driver loaded by Windows.

Paging

The process of saving information stored in RAM to the swap file on the system hard drive so Windows can make the RAM available at a different linear address.

Parallel Port

The parallel port is a connector on the back of your PC and on some peripheral devices. With the appropriate driver software installed and a parallel cable connected to the parallel ports on your PC and a peripheral device, the two can communicate with each other. Parallel transmissions have no EIA standard, but most equipment follows a quasi-standard called the Centronics Parallel Standard.

PCI (Peripheral Component Interconnect) Bus

The PCI Bus is a local motherboard specification (that provides connector slots on the motherboard for installing peripheral cards). The PCI Bus, designed by Intel, offers a high performance, peripheral component level interface to the CPU bus.

Physical Memory

Physical memory is the RAM (Random Access Memory) installed in your PC. See *Random Access Memory (RAM)*.

Protected Mode

A mode of operation of 80286 or later CPUs which allows access to more than 1 MB of memory.

RAM (Random Access Memory)

RAM (Random Access Memory) is also called physical memory. It is installed in your PC on SIMMs (Single Inline Memory Modules) or DIMMs (Dual Inline Memory Modules). RAM is volatile, extremely high-speed storage used by your computer for processing information.

Real Mode

A mode of 80286 or later CPUs, where the CPU operates substantially like an older 8086 CPU and can address directly only 1 MB of memory.

Resources

Resources are objects that *Windows* and its applications can use, such as the buttons on the screen that you can click.

Ring 0, 1, 2, 3

Different levels of protection in protected mode, where programs having varying degrees of freedom of operation. Ring 0 (zero) is least protected and has direct access to all hardware in the system.

Sector

A sector is a pie-shaped portion of a hard disk. A disk is divided into tracks and sectors. Tracks are complete circuits and are divided into sectors. Under DOS, a sector is 512 bytes.

Serial Port

A serial port is an input/output port (connector) that allows the transmission of information out at one bit at a time, as opposed to parallel which transmits eight bits, or one byte at a time.

Swap File

The swap file is created by Windows on the system hard disk. It uses the swap file to copy information stored in part of the linear address space so it can reallocate the RAM used at that location to another linear address space.

Swapping

Swapping is the process of saving to disk or restoring from disk the contents of RAM so that the RAM can be used elsewhere in linear memory.

System Resources

System resources are a series of data structures kept by Windows. System resources are managed by the Windows User and GDI programs and maintain information about objects that appear on your screen.

32BDA (32-Bit Disk Access)

32BDA is a process in Windows where the device driver that accesses the disk runs entirely as a 32-bit program at Ring 0 (zero).

32BFA (32-Bit File Access)

32BFA is a process in Windows where the DOS file operations are controlled by a program, or set of devices, that operate entirely as 32-bit programs at Ring 0 (zero).

Unlocked Memory

Unlocked memory is physical memory that Windows can copy to the swap file on disk, and whose linear address can be changed whenever Windows chooses.

UMB (Upper Memory Block)

The UMB is the area in memory between 640 K and 1 MB that have RAM mapped into them by memory managers, such as Network Associates' Netroom or MemMaker. See *Expanded memory*.

V86 Mode (Virtual 8086 Mode)

V86 mode is a mode of operation of 80386 or later CPUs where programs, originally designed to run in real mode, can run as sub-programs to a protected mode control program or operating system.

Video Memory

Video memory, called VRAM, is physical memory installed on your PC's video card that is used for displaying information on the screen.

Virtual Memory

Virtual memory is the amount of memory that exists either as physical memory (RAM) or on the hard drive (in the swap file). When a part of memory that is located in the swap file is accessed by an application, Windows reads the information into RAM.

VMs (Virtual Machines)

Virtual machines (also called Virtual DOS machines or VDMs) are created in Windows when you open a MS-DOS Prompt window. The VDM is a software emulation of a separate computer, offering all the services that the DOS application expects of a PC.

VxDs (Virtual Device Drivers)

VxDs are used in Windows to communicate with all physical hardware in the system. This prevents any application from having direct access to a piece of hardware. Instead, it communicates only through the VxD for that hardware.

Windows Registry

The Windows Registry file contains user, application, and computer-specific configuration information in a central location that was kept in various .INI files in Windows 3.1. The Registry contains settings that determine how your computer runs.

