Using McAfee Zip Manager

McAfee McAfee Zip Manager is a full-featured file compression utility. It lets you quickly and easily create compressed ZIP files, or unzip existing ZIP files.

There are two ways that you can work with McAfee McAfee Zip Manager. The McAfee McAfee Zip Manager wizard interface guides you step-by-step through basic archive management tasks. The advanced McAfee McAfee Zip Manager interface may take a little longer to learn (unless you are familiar with ZIP archive terminology) but gives you added control over the compression and extraction of your ZIP archive. You can switch between the interfaces by clicking Advanced in the wizard interface and by clicking the wizard button in the Advanced interface.

The procedures you can perform in McAfee McAfee Zip Manager are described in these help topics:

Creating a ZIP Archive File

With McAfee McAfee Zip Manager, you can save storage space by compressing one or more files into a single archive file. After creating a ZIP file, you can add any regular files stored on your drives to it. When you do this, McAfee McAfee Zip Manager uses special methods and mathematical calculations to compress the files, reducing the amount of storage space required to store the information. Compressing files into a ZIP archive file alters the representation of the original file information, but not the information itself. At any time, you can extract (or expand) the individual files to their original state so you can use them.

To create a ZIP archive file using the wizard interface:

1. In the McAfee McAfee Zip Manager wizard, click Create Archive and then click Next.
2. Do one of the following and then click Next:

- To create a new ZIP archive file, type filename in the text box. If you don't specify a location, McAfee McAfee Zip Manager places the file in the Windows folder.
- To create a new ZIP archive file in a specific folder, click Browse, locate the folder to which you want to save the file, and type a filename in the text box.
- To add files to an existing ZIP file, click Browse and locate the file.

3. Do one of the following:

- Type the names of the folders and files you want to add to the archive. Enclose each item in quotation marks (") and add a space between each item. For example,
"C:\grant\education.doc " "C:\grant\analysis.xls" "C:\grant\graphic"
- Click Browse to locate the files to add. Hold down the Shift key to select adjacent files or hold down the Control key to select non-adjacent files.

4. Select Save Folder Information to save the folder path location of files selected in Step 3. If you extract a file using this folder information McAfee McAfee Zip Manager creates a folder of the same name and places the file in that folder.
5. Select Recurse Folders to save all files inside of folders selected in Step 3. This option includes folders that are nested inside other folders.
6. Click Finish.

   McAfee McAfee Zip Manager creates the new ZIP archive file in the location you specified.

To create a ZIP archive file using the Advanced interface:

1. In McAfee McAfee Zip Manager, choose the New command from the File menu (or press **Ctrl-N**).

   The New Archive dialog box appears.
2. Enter a filename for the ZIP archive file in the File Name text box.
3. Select where the ZIP file should be stored.
4. Click the Open button.

   McAfee McAfee Zip Manager creates a empty new ZIP archive file in the location you specified. You are ready to add regular files (that you want to compress) to this archive file as explained in the Adding Files to a ZIP File topic.

Tip You may want to make this ZIP file into a self-extracting (or self-decrypting) executable file so that you or other people can extract the files it contains without having access to McAfee McAfee Zip Manager. This process is explained in the Making a Self-Extracting ZIP File topic.

Selecting McAfee McAfee Zip Manager Options

McAfee McAfee Zip Manager lets you specify options about zipping files, unzipping files, and about McAfee McAfee Zip Manager shell, which determines how McAfee McAfee Zip Manager appears in the Windows Explorer.

To select McAfee McAfee Zip Manager options:

1. Do one of the following:
   - In the McAfee McAfee Zip Manager wizard interface, click Properties.
   - In the McAfee McAfee Zip Manager Advanced interface, choose the Options command from the File menu.

   The Options dialog box appears.
2. Select the options you want in the General tab, the Zip tab, the Unzip tab, and the Favorite Folders tab.

   Click each tab to bring it to the front and specify its options.
3. Click OK.

Opening a ZIP File

You can reopen a ZIP archive file that you've created with McAfee Zip Manager, or that was created with another compression utility that creates ZIP files. ZIP files have a file extension of ZIP.

To open a ZIP file:

1. In McAfee McAfee Zip Manager, choose the Open command from the File menu.

   The Open Archive dialog box appears.

2. Select the ZIP file you want to open and click the Open button.

   The ZIP archive file's contents appears in the McAfee McAfee Zip Manager window.

Getting Information About a ZIP File

McAfee McAfee Zip Manager can display information about the currently open ZIP file. It also lets you add a comment for the file.

To get information about a ZIP file using the Advanced interface:

1. In McAfee McAfee Zip Manager, create or open a ZIP file where you want to add files.
2. Choose the Information command from the File menu.

   The Information dialog box appears.
3. Add a comment for the ZIP file if you like in the Comment text box and click OK when you finish.

Setting a Password for a ZIP File

You can specify a password that takes effect for subsequent ZIP files you create.

To set a password for a ZIP file:

1. In McAfee McAfee Zip Manager, create or open a ZIP file where you want to specify a password.
2. Choose the Set Password command from the File menu.

   The Password dialog box appears.
3. Enter a password and click OK.

   Anyone who attempts to open this ZIP file must enter this password first.

Adding Files to a ZIP File

You can add regular files stored on your drives to a ZIP file. This lets you compress them and store them as part of a collection of files in the open ZIP file. You can reopen a ZIP file and add files to it or remove files from it at any time.

To add files to a ZIP file using the wizard interface:

1. In the McAfee McAfee Zip Manager wizard, click Add Files To Existing Archive and then click Next.
2. Do one of the following and then click Next:

- Type the filename of the ZIP archive file in the text box. If you don't specify a location, McAfee McAfee Zip Manager looks for the file in the Windows folder.
- Click Browse to locate the ZIP archive file to which you want to add files.

3. Do one of the following:

- Type the names of the folders and files you want to add to the archive. Enclose each item in quotation marks (") and add a space between each item. For example,
"C:\grant\education.doc " "C:\grant\analysis.xls" "C:\grant\graphic"
- Click Browse to locate the files to add. Hold down the Shift key to select adjacent files or hold down the Control key to select non-adjacent files.

4. Select Save Folder Information to save the folder path location of files selected in Step 3. If you extract a file using this folder information McAfee McAfee Zip Manager creates a folder of the same name and places the file in that folder.
5. Select Recurse Folders to save all files inside of folders selected in Step 3. This option includes folders that are nested inside other folders.
6. Click Finish.

To add files to a ZIP file using the Advanced interface:

1. In McAfee McAfee Zip Manager, create or open a ZIP file where you want to add files.
2. Choose the Add Files command from the Actions menu (or press **Ctrl-A**).

   The Add Files dialog box appears.
3. Select the files you want to add to the open ZIP file and any other options in this dialog box.
4. Click the Add button.

   McAfee Zip Manager displays a progress thermometer at the bottom of the McAfee Zip Manager window. When the process is complete, the files you added appear in this window's file list.

Removing Files From a ZIP File

You can remove compressed files from a ZIP file to permanently delete them. This does not extract a copy of the file in its regular form, so be sure you either have a regular copy of the file, or that you want to delete it.

To remove files from a ZIP file:

1. In McAfee Zip Manager, create or open a ZIP file.
2. Select the files you want to remove.

   If you want to remove all the files from the ZIP file, you don't need to select any of them.
3. Choose the Remove Files command from the Actions menu (or press **Ctrl-R**).

   The Delete Files dialog box appears.
4. Select whether to delete the selected files or all files. Then click OK.

   McAfee Zip Manager removes the files from the archive file's list in the McAfee Zip Manager window.

Extracting Files From a ZIP File

You can extract a copy of compressed files in a ZIP file to store a copy of them in their regular, uncompressed form in the location you select. The compressed files remain inside the ZIP file unless you remove them. This ensures you retain an archive copy of files you've compressed.

To extract files from a ZIP file using the wizard interface:

1. In the McAfee Zip Manager wizard, click Extract Files From Archive and then click Next.
2. Do one of the following and then click Next:
   - Type filename in the text box. If you don't specify a location, McAfee Zip Manager looks for the file in the Windows folder.
   - To look for a ZIP archive file, click Browse to locate the file that you want to open.
3. Select the files you want to extract. By default, all files are selected. If you want to clear the selection and start over, click Deselect All. Hold down the Shift key to select adjacent files or hold down the Control key to select non-adjacent files.
4. Click Next.
5. Type the location where you want to store the extracted files. Click Browse to locate a folder.
6. Click Finish.

To extract files from a ZIP file using the Advanced interface:

1. In McAfee Zip Manager, open a ZIP file containing files you want to extract.
2. Select the files you want to extract.

   If you want to extract all the files in the ZIP file, you don't need to select any of them.
3. Choose the Extract Files command from the Actions menu (or press **Ctrl-E**).

   The Extract Files dialog box appears.
4. Select the location where you want to store the extracted files.

   You can click the New Directory button to create a new directory (or folder) at the current location.
5. Select whether to extract the selected files or all files.
6. Select whether you want the extracted files to overwrite any existing files with the same filename, overwrite only older files with the same filename, or not overwrite files with the same filename.
7. Click OK.

   McAfee Zip Manager extracts a copy of the files, storing them in regular uncompressed form in the location and using the options you specified.

Editing a Compressed File's Comment

You can add or edit a comment for any one of the compressed files in the open ZIP file.

To edit a compressed file's comment:

1. In McAfee Zip Manager, create or open a ZIP file.
2. Select a compressed file in the list that you want to add a comment to, or edit the comment for.
3. Choose the Edit Comment command from the Actions menu (or press **F3**).

   McAfee Zip Manager makes the Comment text box at the right side of the list active for the selected compressed file.
4. Add or edit the comment text.

   When you click outside the text box, the comment is saved.

Verifying a ZIP File

You can verify the contents of a ZIP file.

To verify a ZIP file:

1. In McAfee Zip Manager, create or open a ZIP file.
2. Choose the Verify command from the Actions menu.

   McAfee Zip Manager verifies the contents of the ZIP file.

Making a Self-Extracting ZIP File

You can make a ZIP file self-extracting, or self-decrypting. This ensures that the files it contains can be extracted, even without McAfee Zip Manager being present on your PC.

This is especially useful if you share ZIP files with other people. If you give someone else a copy of a self-extracting ZIP file, they won't need to have either McAfee Zip Manager utility or another utility that can extract ZIP files.

McAfee Zip Manager creates a self-extracting ZIP file by adding a small program to the ZIP file itself. This small program is able to extract the ZIP file that it is a part of automatically when you double-click the ZIP file icon or run the ZIP file (which is stored as an executable EXE file).

To make a self-extracting ZIP file using the wizard interface:

1. In the McAfee Zip Manager wizard, click Build Self-Extracting Archive and then click Next.
2. Do one of the following and then click Next:

- Type filename in the text box. If you don't specify a location, McAfee Zip Manager looks for the file in the Windows folder.
- To look for a ZIP archive file, click Browse to locate the file that you want to open.

3. In the text box, McAfee Zip Manager automatically adds the same path and filename with an .EXE file extension. Click Finish to use the suggested name or to change the filename or location, do one of the following:

- Type a filename for the self-extracting ZIP file in the text box. If you don't specify a location, McAfee Zip Manager places the file in the Windows folder. Click Finish.
- Click Browse to change the location where you want to place the file and click Save.

To make a self-extracting ZIP file:

1. In McAfee Zip Manager, create or open a ZIP file.
2. Choose the Make .EXE command from the Actions menu.

   The Self-Decrypting File Properties dialog box appears.
3. Select any options for the self-extracting ZIP file and click OK.

Exiting McAfee Zip Manager

Choose the Exit command from the File menu (or press **Alt-F4**) to exit McAfee Zip Manager.

McAfee Zip Manager Window

This window contains the following options:

- **Toolbar**
  Point to tool buttons on the toolbar to see a brief description of their purpose in the status bar at the bottom of the McAfee Zip Manager window.

- **Compressed File List**
  The Compressed File list displays any compressed files in the currently open archive file. If you have not added any files yet, the list is empty. You can drag the left and right edges of the column titles right or left to widen or narrow a column. The Comment column at the far right of this list lets you add your own comments for each compressed file in the list.

McAfee Zip Manager Associations Dialog Box

This dialog box appears when you first start McAfee Zip Manager. It contains the following options:

- **Do not show this message again**
  Select this check box if you do not want to see this message again.
- **OK**
  Click OK to make McAfee Zip Manager the default program to be used with ZIP files in Windows.
- **Cancel**
  Click Cancel to close this dialog box without changing any settings.

New Archive Dialog Box

McAfee Zip Manager displays a standard Windows New dialog box where you can specify the filename for your new archive file. You can also select a drive and folder where the archive file you are creating should be stored. After you specify a filename and location, click the Open button.

Add Files Dialog Box

McAfee Zip Manager displays a standard Windows Open dialog box where you can specify the location and select files to add to the currently open archive file.

Tip You can select multiple contiguous files by holding down the **Shift** key while you select files in the list. Or you can select multiple non-contiguous files by holding down the **Ctrl** key while selecting files.

This dialog box also contains the following options:

- **Add File Action**
  Select a file action to perform from the drop-down list box. Your choices are to add the selected files, freshen (add newer versions of files that are contained in the archive file), update (re-add all files in this archive file, whether the version is later or not), or move the selected files.
- **Excluded File Types**
  Select any file types to exclude from the files you select to add to the archive file.
- **Save Folder Info**
  Select this check box to save folder information when adding it to the archive file.
- **Save This Folder**
  Select this check box if you want McAfee Zip Manager to save the current folder when adding the selected files to the archive file.
- **Recurse Folders**
  Select this check box if you want McAfee Zip Manager to keep track of the hierarchical structure of files within folders (or subdirectories).
- **Add**
  Select the files you want to add along with any options and click the Add button. McAfee Zip Manager adds the selected files to the currently open archive file.
- **Cancel**
  Click Cancel to close this dialog box without adding any files to the archive file.
- **Password**
  Click the Password button if you want to specify a password for this file addition.

Password Dialog Box

This dialog box contains the following options:

- **Enter Password**
  Enter a password for the open archive file to ensure that only people who can enter this password can open this archive file later.

  It is a good idea to use a word, or combination of words and numbers, that are easy for you to remember but difficult for anyone else to guess. For example, your birth date, children's names, or pets' names might be easy to guess. However, if you mix numbers from your birth date with a familiar name, the password becomes much more difficult to guess easily.

- **Save**
  Click Save to save your changes to the value data and return to the McAfee Zip Manager window.

- **Cancel**
  Click Cancel to close the String Edit dialog box without changing the value data.

Information Dialog Box

This dialog box contains the following information and options:

- **Path**
  The path where the archive file is stored.
- **Size**
  The size of the archive file in bytes.
- **Number of Files**
  The number of files stored in this archive file.
- **Average Compression**
  The average percentage of compression achieved for these files.
- **Date and Time**
  The date and time when this archive file was last created or edited.
- **Comment**
  Add or edit the comment associated with this archive file.
- **OK**
  Enter or edit the comment and click OK to accept the changes you've made.
- **Cancel**
  Click Cancel to close this dialog box without making any changes.

Options Dialog Box

This dialog box contains the following options:

- **Zip Tab**
  The Zip tab contains options for folders and ZIP folders used when zipping files.
- **Unzip Tab**
  The Unzip tab contains options about how McAfee Zip Manager unzips files.
- **Shell Tab**
  The Shell tab contains options about how McAfee Zip Manager appears in the Windows Explorer.
- **OK**
  Enter or edit the comment and click OK to accept the changes you've made.
- **Cancel**
  Click Cancel to close this dialog box without making any changes.
- **Apply**
  Click the Apply button after making changes in any of the tabs in this dialog box. You can select a different tab and continue selecting options. When you finish selecting options, click OK.

Zip Tab

The options you can select in the Zip tab become the default settings when you add files to the open archive file. However you can change them if you like.

This tab contains the following options:

- **Compression Options**
  Select whether you want McAfee Zip Manager, by default, to save folder information, save this folder (the current folder when you add files to the archive file), or recurse folders (save the hierarchical information for folders).

- **Source of Files To Compress**
  This selection allows you to have the option of setting a default folder where you want McAfee Zip Manager to save any of your archived files. The use of this option makes it convenient and efficient for you to store your compressed files especially if you already have a folder designated to hold these types of files. Other than by default, you can also set to save your compressed files to a current folder, an archive folder, or the last folder.

Unzip Tab

This tab contains the following options:

- **Overwrite Options**
  Select whether you want McAfee Zip Manager, by default, to overwrite the existing files with the same filename when extracting files from an archive file, to overwrite only older existing files, or to not overwrite existing files.
- **Extraction Destination**
  Select whether you want McAfee Zip Manager, by default, to unzip files to the current folder, the archive folder, or the last folder used when unzipping files.
- **Other Options**
  Select whether or not you want, by default, to extract files from the archive file using the path specified when adding files to the archive file.

General Tab

This tab contains the following options:

- **Explorer Settings**
  Select whether you want to make McAfee Zip Manager the default program associated with archive files, whether to install the context menu, and whether to install the McAfee Zip Manager as a desktop icon.
- **Startup Options**
  Select whether you want McAfee Zip Manager to open with the wizard interface rather than the advanced interface.

Delete Files Dialog Box

This dialog box contains the following options:

- **Selected Files/All Files**
  Select whether to delete the files in the archive file that were selected when you chose the Delete Files command from the Action menu or delete all files.

- **OK**
  Click OK to delete either the selected files or all files.

- **Cancel**
  Click Cancel to close this dialog box without deleting any files.

Extract Files Dialog Box

McAfee Zip Manager displays a standard Windows Save dialog box where you select the location where the files you want to extract should be stored. In addition, this dialog box contains the following options:

- **Extract With Path**
  Select whether or not you want to extract files from the archive file using the path specified when adding files to the archive file.
- **All Files/Selected Files**
  Select whether to extract all files in the archive file, or only the files that were selected when you chose the Extract Files command from the Action menu.
- **Synchronize**
  Click the Synchronize button to synchronize files in the archive with existing files in the current folder.
- **Password**
  If a password is required for this archive file, click the Password button and enter it before clicking the OK button to begin extracting the selected or all files.
- **OK**
  Click OK to extract either the selected files or all files.
- **Cancel**
  Click Cancel to close this dialog box without extracting any files.
- **New Directory**
  Click New Directory to create a new directory (or folder) inside the current folder. The New Directory dialog box appears.

New Directory Dialog Box

This dialog box contains the following options:

- **Enter Name of New Directory**
  Enter the name for your new directory (or folder)
- **OK**
  Click OK to create the specified directory.
- **Cancel**
  Click Cancel to close this dialog box without creating a new directory.

Open Archive Dialog Box

McAfee Zip Manager displays a standard Windows Open dialog box where you select a drive and folder where the archive file you want to open is located. Once you've selected the archive file, click the Open button to open it in the McAfee Zip Manager window.

Self-Decrypting File Properties Dialog Box

This dialog box contains the following options:

- **Caption**
  Enter an optional caption for this self-extracting ZIP file in the Caption text box.

- **Main Text**
  Enter an optional comment for this self-extracting ZIP file in the Main Text text box.

- **Settings**
  Select the options you want to use with this self-extracting ZIP file:

  Prevent user from changing destination - Select this option and this self-extracting ZIP file will always extract files to the current directory or to the temp directory, depending upon which option you select here.

  Allow user to view contents - Select this option and anyone who can open this self-extracting ZIP file using the Open command from the File menu can see the list of compressed files along with any comments you've entered.

  Always overwrite files - Select this option if you want the files in this self-extracting ZIP file to always replace any existing files with identical filenames, even if the compressed files were created before the existing files.

  Automatically decrypt files - Select this option if you want this self-extracting ZIP file to automatically open when you double-click its icon, run it, or open it in McAfee Zip Manager.

  Execute command after decrypting - Select this option if you want to run a command after this self-extracting ZIP file finishes extracting the compressed files it contains. When you select this check box, the Command Line text box becomes active where you can enter the command you want to perform after decryption.

- **Change**
  Click the Change button to select a different icon to use with this self-extracting ZIP file. The Open dialog box appears.

- **OK**
  Click OK when you finish selecting options in this dialog box.

- **Cancel**
  Click Cancel to close this dialog box without changing any options.

Open Dialog Box

McAfee Zip Manager displays a standard Windows Open dialog box where you select a drive and folder where the icon you want to use is located. Once you've selected the icon file, click the Open button.

Favorite Folders Tab

You can locate and open your ZIP archive files quickly by designating the folders that contain the ZIP files as a “favorite” in the Favorite Archive Folders dialog box.

Use this tab to locate folders that you want to add to the Favorite Archive Folders dialog box. This tab contains the following options:

- **Add**
  Browse for a folder that you want to add to the Favorite Folders Tab list.
- **Remove**
  Delete the selected folder from the Favorite Folders Tab list.
- **Search**
  Search all fixed drives or a selected drive for folders containing ZIP archive files. This adds the folders to the list in the Favorite Folders Tab.
- **OK**
  When you click OK, the folders in the Favorite Folders Tab list are added to the Favorite Archive Folders list.

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.