First Aid 97 Glossary

16-bit

(*see also* 32-bit)

A reference to Windows 3.1 or lower and the application programs associated with those operating systems. Because Windows 95 is backward compatible, it can run 16-bit applications.

32-bit

(*see also* 16-bit)

A reference to Windows 95 and Windows NT and the application programs associated with those operating systems. Although Windows 95 can run the older 16-bit applications, 16-bit operating systems (Windows 3.1 or and lower) cannot run 32-bit applications.

active window

The last window you clicked on—the one that's currently highlighted—is considered active. Any key you press affects this window. You can change the active window by clicking it or pressing Alt+Tab.

ANSI

Acronym for the ***American National Standards Institute***.

An organization of over 1,300 members, including many industry giants, that has been responsible for creating standards for the computer industry since 1918. The standards cover a wide range, from electrical specifications to communications protocols.

architecture

In computer software and hardware, architecture refers to the overall design of a system.

A system designed with an *open architecture* allows it to be connected easily to devices and programs of different manufacturers.   On the other hand, a system with a *closed architecture* is difficult to merge with other systems.

archive

(*see also* backup, file attribute)

As a verb, archive means to copy files to a long-term storage medium for backup. It can also refer to the act of compressing a file.

As a noun, an archive is a disk or tape or any other storage medium used to hold files that have been archived. In MS-DOS-based personal computers, archive is a file attribute designed as a precautionary measure to remind the user to back up important data. Files with the archive attribute are marked by the operating system if they have been modified since they were last backed up.

ASCII

Acronym for ***American Standard Code for Information Interchange***, a coding system that assigns numeric values to letters, numbers, punctuation marks, and other characters.

For example, the ASCII code for uppercase *"*N*"* is 78. The ASCII standard is generally used to represent unformatted text which is easily transferred from one computer to another. These files are stored in ASCII format are called ASCII files, or *text files*, and are edited using a [text editor](). Some of the most common ASCII files are [Config.sys]() and [Autoexec.bat]().

AT

Acronym for ***advanced technology.***

The AT is an [IBM PC](#) model introduced in 1984 including an Intel 80286 microprocessor, a 1.2 [MB](#)   floppy drive, and an 84-key AT keyboard. ATs are too slow to run most of today's software, including [Windows 95](#).

AT keyboard

An 84-key keyboard introduced with the PC/AT .

The AT keyboard was later replaced with the 101-key Enhanced Keyboard.

Autoexec.bat

(*see also* Config.sys)

A batch file used in MS-DOS systems to configure software automatically whenever the computer is started.

Autoexec.bat controls the software environment by loading device drivers, applications, and by specifying operating system and software settings during startup. A second file, Config.sys, is used for a similar purpose, but to control hardware settings. Autoexec.bat and Config.sys are needed by Windows 95 only to support older Windows applications.

AutoFix

A command that instructs CyberMedia's First Aid 97 to try to repair a problem automatically.

AVI files

Acronym for *Audio Video Interleave*, a format used for video files in Microsoft [Windows](). All AVI files have an AVI [file name extension]().

backup

(*see also* archive)

To copy data onto a separate storage medium (a disk or tape) in case that data is somehow lost.

There are a host of ways to inadvertently lose data: computers can crash; disk drives can break; electrical power can fail. The only reliable precaution you can take is to save your data often and then backup that data to another storage medium. You can backup data manually, or you can use one of the many backup utility programs available on the market, such as Windows 95's Backup, which you can run from First Aid 97.

batch file

(*see also* ASCII file)

An ASCII file containing a sequence, or batch, of operating system commands.

Batch files are useful for consolidating sets of commands that must be executed in a specific order. In MS-DOS, a batch file has the file extension BAT. The most common batch file is Autoexec.bat, which automatically runs at startup on MS-DOS computers.

battery life

Broadly speaking, battery life is the longevity of the life of a battery. In laptop computers, however, battery life refers to the remaining amount of time the computer can run on battery power before it must be recharged. Battery life can be extended by reducing the amount of power consumed by the computer. In Windows 95, this is done from the Control Panel.

baud rate

(*see also* kbps)

A reference to the speed at which a modem transfers data.

Baud rate is often confused with number of bits per second (bps). Baud rate measures the number of events, or signal changes, that occur in one second. Since more than 1 bit can be encoded in a single event, baud rate and bps are not always the same. Bps has replaced baud rate as the dominant measure of modem speed, as it is the more accurate measure of the two.

BIOS

Acronym for ***basic input/output system***, a set of built-in software routines that work closely with the hardware to support the transfer of information between the CPU and its various components, such as memory, disks, modem, keyboard, monitor, and printer.

BIOS is invisible to the computer user, and in MS-DOS computers is built into the machine's read-only memory (ROM BIOS). This ensures that the BIOS will always be available and will not be damaged by disk failures. It also ensures that the computer will always be able to boot itself.

bit

Short for **binary digit**, the smallest measure of computer information.

A single bit can hold either 1 or 0 in the binary number system. All computer information is built on consecutive combinations of bits into larger units. For example, a group of eight bits, or a byte, is used to represent a single character in the alphabet.

bit map

A graphics image consisting of rows and columns of dots.

In bit map graphics, also known as raster graphics, each dot, or pixel, on the screen is equal to one bit of memory. For color or shades of gray, more than one bit is required to represent a pixel. When stored as graphic files, bit maps have the file extension BMP. Unlike vector graphics, in which objects are constructed as collections of lines rather than patterns of individual dots, bit images depend on screen resolution for proper display.

boot disk

Also called a *startup disk*, the boot disk contains the startup instructions for your computer.

The boot disk is usually the hard disk. You should use First Aid to create a backup floppy boot disk in case you can't start up with your hard disk.

booting the computer

To start or restart the computer.

A boot can be "cold," as when a dormant computer is switched on, or "warm," as when you restart the computer either by using Shut Down in Windows 95 or by pressing Ctrl-Alt-Del.

browser

A software program that translates HTML (hypertext markup language) files on the Internet into the pictures, text, and hypertext that you see on your computer screen.

Browsers provide a means of viewing the contents of nodes and of navigating from one node to another. Netscape, Internet Explorer, Mosaic, and Lynx are all browsers for the World Wide Web. They act as clients to remote web servers.

buffer

A region of <u>memory</u> used as a temporary storage area.

Most buffers are used as holding areas for data before it is transmitted to a <u>peripheral</u> device such as a printer, <u>modem</u>, or disk. Since data transfer to these devices is relatively slow, most programs keep track of data using buffers. For example, it might take less than one minute for a word processor to send a large <u>document</u> to a printer, but fifteen minutes for the printer to actually print that document. During the interim, the document is stored in a buffer.

bug

Any unexpected defect or malfunction in a program or piece of hardware.

bus

A collection of wires through which data is transmitted from one part of a computer to another.

In microcomputers, the term bus usually refers to the *expansion bus*, which connects various hardware devices (e.g., expansion boards, disk drives, printers) to the CPU.

byte

(see also [bit](#), [kilobyte](#))

The second smallest measure of computer information, equal to eight bits. It is the equivalent of one letter or character. [Hard disk](#) size is measured in [megabytes](#) (MB) and [gigabytes](#) (GB).

cache

A special high-speed storage mechanism in which frequently used data is stored for quick access.

In most PCs, a cache can be either a reserved section of main memory (RAM) or an independent storage device (disk cache). The chief measure of a cache is its "hit rate" -- the percentage of all memory accesses performed by the cache. Since RAM caches use high-speed static RAM (SRAM) instead of the slower dynamic RAM (DRAM), a RAM cache hit takes much less time to complete than a normal memory access.

case-sensitive

A reference to the ability of a software program to differentiate between upper- and lowercase letters.

CD-ROM

Acronym for **Compact Disc Read-Only Memory**, a technology in which data is stored on a compact disc.

Compact discs are capable of storing up to 1 GB of data, although typical storage capacity is 630MB. Unlike floppy disks and hard disks,the data stored on compact discs is ''read only,'' meaning that it cannot be erased or written over once it has been recorded onto the disk.

chat

The process of talking to another person over a computer line in "real time" (without any time delay) either by typing messages or through <u>Internet</u> audio recorders and players.

chip

A tiny piece of semi-conducting material (usually silicon) on which an integrated circuit is embedded.

A typical chip is less than ¼-square inches and can contain millions of electronic components (transistors). Computers consist of many chips placed on electronic boards called printed circuit boards. There are many different kinds of chips. For example, CPU chips, (also called microprocessors) contain an entire processing unit, whereas memory chips contain blank memory.

CHKDSK

A [DOS](#)-based [utility](#) program that checks your [hard disk](#) for errors and displays a summary report of its attributes. CHKDSK is now obsolete because all of its functions are performed by [ScanDisk](#).

clipboard

An area of system memory that holds information temporarily. When you *cut* information from a text or graphics file, it is held in the clipboard before you *paste* it to a new destination.

CMOS

Acronym for ***complementary metal-oxide [semiconductor](#)***.

The great advantage of the CMOS is its low rate of power consumption. As a result, it is frequently used in devices such as laptop computers that rely on battery power. When you turn your computer off, the CMOS continues to maintain information such as the date and time.

Command.com

The DOS file that contains the DOS command processors.

The command processor is responsible for displaying the prompt on a computer's display and all the internal DOS commands. Windows 95 doesn't utilize the Command.com file since it is not a DOS-based operating system.

command prompt

A symbol that looks like C:\ or [C:\] or A:\ or something similar. The command prompt is the place where you can type instructions, or commands, in older operating systems like DOS. The graphics user interface (GUI) used by the newer operating systems, such as Windows and Macintosh OS, do not use a command prompt.

COM port

(*see also* parallel port)

Short for **serial communications port**, the COM port is an input/output channel for certain peripheral hardware devices.

The term COM port refers to both the external sockets on a computer where peripheral serial devices are connected, and to the physical location in the computer where communications data enters and exits the CPU. Peripheral serial hardware devices include modems, mice, and some printers. Although MS-DOS supports four logical COM ports (COM1, COM2, COM3, and COM4),   most computers have only two physical COM ports.

Config.sys

(*see also* <u>Autoexec.bat</u>)

A file used in <u>MS-DOS</u> systems to load <u>device driver</u>s and specify hardware settings.

Config.sys runs every time you start your computer. You can use it to specify <u>buffer</u> size and other settings that determine how the <u>operating system</u> interacts with the hardware.

configuring hardware

A term referring to the general process by which the <u>operating system</u> is set up to recognize and work with hardware.

Typical examples of configuring hardware include adding or changing <u>device driver</u>s, installing new hardware, and adjusting resource settings to accommodate a hardware device.

Control Panel

A Windows 95 utility program that allows the user to control parameters such as fonts, display resolution, printer drivers, software installation, port connections, keyboard settings, passwords, and system date and time.

conventional memory

The first megabyte of RAM in DOS-based computers.

The DOS operating system is limited to using only this memory. However,   there are techniques, such as the extended memory specification (EMS), that can enable the system to use a greater amount of memory.

CPU

Acronym for **central processing unit**, the "brains" of the computer.

Also known as the *microprocessor*, *central processor*, or simply *processor*, the CPU is the primary gauge of a computer's computational power and therefore its most important element. CPU speed is measured in megahertz ([MHz](#)). Oftentimes the CPU is incorporated into the computer's model name. For example, the Millennia Transport P133 contains a 133 MHz Intel Mobile Pentium processor.

cross-linked files

An error in which two or more files are using the same area of a hard disk.

Because a cross-linked cluster usually belongs to only one of the files, repairing the cross-linked files most often results in only one file remaining usable. The Windows 95 utility ScanDisk can check for and repair cross-linked files.

cursor

The blinking line that shows where the next letter will appear when you start typing.

data compression

Also called data packing or compaction, compression is a process by which data is stored in a format that requires less space than usual.

Data compression is especially useful in communications because compressed data require less time to transmit than regular data. It is also used in backup utilities, spreadsheet applications, graphics, and database management systems to reduce the size of stored files. A common file compression standard is ZIP, which is supported by programs such as WinZip and PKZIP. Compression is often used to reduce the size of audio and video files as well, since these files are often extremely large.

DDE

Acronym for *dynamic data exchange*, a form of information exchange between programs built into the Macintosh, Windows, and OS/2 operating systems.

DDE enables two programs running simultaneously to share the same data. For example, a spreadsheet program could update stock prices in a spreadsheet with information received from a communications application.

default language

The language automatically used by the keyboard when the user does not specify an alternative.

When you purchased your computer, the default language was set to English. You can change the default language from Keyboard in the Windows 95 Control Panel.

default printer

The printer that software programs automatically use when the user does not specify an alternative.

You can change the default printer by double-clicking the Printers icon in the Control Panel.

delete

In relation to computer files, the process of erasing a file from a disk.

desktop

A metaphor for a file system within the Windows environment.

A desktop usually consists of icons that may portray application shortcuts, files, folders, or various types of documents. Icons can be organized on the electronic desktop just as real objects on a real desktop, by moving them around, placing one atop the other, or even throwing them into the recycle bin.

device driver

A program that controls or regulates a hardware device.

Every device, whether it be a printer, disk drive, CD-ROM or keyboard, must have a driver program. Many drivers, such as the keyboard driver, come with the operating system.   For other devices, you may need to load a new driver when you connect the device to your computer.   In DOS systems, drivers are files with a .SYS extension. In Windows, drivers have a .DRV file extension.

Device Manager

A property page on the System property sheet in the Control Panel that enables you to control the devices installed on your computer.

Device Manager can be used to change device drivers, remove device drivers from the system, print a summary of all devices in the computer, and print a system summary.

DIP

(*see also* DIP switch)

DIP is an acronym for **dual in-line package**, a type of chip. Also known as DIL.

DIP switch

A DIP (dual in-line package) switch is a series of tiny rocker- or sliding-type switches built into circuit boards.

Each DIP switch can be set to one of two positions, closed or open, to configure a circuit board for a particular type of computer or application. The new Plug and Play standard in Windows 95, however, makes DIP switches obsolete for newer computers and hardware components.

disk defragmenter

(*see also* file fragmentation)
A DOS-based utility program used to reorganize or defragment a disk on which data is stored.

Fragmentation of data occurs naturally when creating, deleting, or modifying files. When a file becomes too large for the space allotted, the operating system automatically splits the file into two or more chunks. These chunks may be placed in different locations on the disk, depending on which spaces on the disk are occupied. Because fragmentation slows the speed at which data is accessed, defragmenting a disk can significantly improve its performance.

disk storage

The number of bytes available for storing data or programs on a disk.

Most 3.5" floppy disks have a disk storage capacity of 1.44 megabytess. Hard disk storage size varies greatly and increases every year.

disk tools

A group of utility programs packaged with Windows 95 designed to manage disk drive data. The disk tools are Backup, Disk Defragmenter, DriveSpace, and ScanDisk.

DLL

Acronym for ***dynamic link library***, a type of file that contains instructions used as an additional resource by a particular program.

DLLs are "dynamic" because they link to the main program at the moment they are needed rather than in advance. The advantage of DLLs is that they can be used by more than one program. DLL files are distinguished by the .DLL file extension.

DMA

Acronym for ***direct memory access***, a high-speed method of transferring memory that does not involve the CPU.

Computers that have DMA channels can transfer data   to and from peripheral devices with much greater speed than computers that do not. DMA is usually employed for data exchange between memory and a peripheral such as a disk drive.

DNS

Acronym for ***domain name system***, a distributed database chiefly used on the Internet for looking up computer names and translating them into Internet addresses.

A DNS maintains a database of domain names and their corresponding Internet addresses. You can specify the Internet address of multiple DNS servers in your Windows 95 TCP/IP configuration.

document

A file containing data, created or changed from within an application program.

DOS

(*see also* MS-DOS)

Acronym for ***disk operating system***, a generic term for any operating system loaded from disk devices.

The term DOS was used originally to differentiate between disk-based operating systems and primitive operating systems that depended entirely on memory or magnetic or paper tape. Today it most often refers to Microsoft's MS-DOS, the standard operating system for IBM-compatible computers. Even today, MS-DOS is included with Windows 95.

dot-matrix printer

A printer that produces characters and illustrations by striking pins against an ink ribbon to print closely spaced dots. Though dot-matrix printers are the least expensive on the market and are relatively fast, they have a fairly low-quality output.

double-click

Pushing and releasing the left mouse button twice in rapid succession.

download

The process of copying a file to a computer from a [network](#), an [on-line service](#) or bulletin board.

The opposite of download is *upload*, which means to copy a file from your own computer to another.

drag and drop

To drag is to select an object—an icon, a highlighted paragraph, or something similar—and move that object to a new location. Dropping is letting go of the mouse button to place the selected object in its new location.

DRAM

(*see also* SRAM)

Acronym for ***dynamic*** ***random access memory***, a type of memory chip used in most computers.

Although DRAMs are slower than SRAMs, they are commonly used because their inner circuitry is simpler, their storage capacity is higher, and their price is lower.

DRV

File name extension for programs called device drivers.

Dvorak keyboard layout

(*see also* Qwerty)

A keyboard designed for speed typing by August Dvorak in the 1930s.

The Dvorak keyboard differs from the Qwerty keyboard in that most words can be typed from the middle row of keys. Dvorak also designed a left-handed and right-handed keyboard for people with only one hand.

EIDE

Acronym for ***enhanced integrated drive electronics***, a new version of the <u>IDE</u> mass storage device interface.

Developed by Western Digital Corporation, EIDE can support data exchange rates of between 11.1 and 13.3MB (<u>megabyte</u>s) per second, nearly four times faster than the old IDE standard. Furthermore, it can support mass storage devices of up to 8 <u>gigabyte</u>s, whereas the old standard was a mere 528MB.

EISA

(*see also* MCA)

Acronym for ***extended industry-standard architecture***, a bus architecture for computers.

EISA was designed by a consortium of IBM competitors to compete with MCA, IBM's own high-speed bus architecture. EISA is not compatible with other buses. Therefore the type of bus in your computer determines what kind of expansion cards you can install in your computer.

EMM

Acronym for *expanded memory manager*, a <u>device driver</u> that handles <u>memory</u> management on <u>MS-DOS</u>-based personal computers. Examples include EMM386 and QEMM386.

EMS

(*see also* EMM)

Acronym for **expanded memory specification**, a standard for adding additional memory to a computer.

EMS is a standard that enables DOS programs to use more than 1MB (megabyte) of main memory. The limit of 1MB is built into the DOS operating system. Expanded memory resides outside of conventional memory, but can be mapped into the address space of the processor.

ESDI

Acronym for ***enhanced small device interface***, an abbreviation of an interface for connecting disk drives to computers developed by a consortium of leading personal computer manufacturers. Introduced in the early 80s, ESDI is already obsolete.

expansion board

A printed circuit board or inserted inside a computer to expand capabilities.

Also called adapters, cards, add-ins, and add-ons.   Examples: video adapters, graphics accelerators, sound cards, accelerator boards, internal modems.

extended memory

(*see also* XMS, expanded memory)

Special memory above the first megabyte of address space in computers based on the Intel 80286/386/486 and Pentium processors.

Unlike expanded memory, which a DOS programs can use through EMS, extended memory is unavailable to most DOS programs. However, it is available to OS/2 programs, and can be made available to DOS with the use of special software.

FAT

Acronym for **File Allocation Table**.

A table used by the operating system to locate files stored on either a floppy or a hard disk.   Due to the naturally occurring process of fragmentation, a file may be scattered into many sections on the disk. The FAT keeps track of all these pieces.

field

A space set aside for a specific piece of information.

Forms contain many fields, each labeled with a "field name" designed to accept a particular piece of information.   For example on registration forms, the areas allocated for first name, last name, street address, city, state, etc., are all fields . Fields also have attributes; some are numeric, some textual and can be varied in length.   Fields are especially helpful in the realm database management, in that specific information can be accessed and retrieved with a great deal of ease

file allocation units

Refers to the method by which files are stored on a disk drive.

Files are stored on a disk in groups of bytes rather than in continuous strings of text or numbers. This means that a single file may be located in separate pieces spread over many different storage areas.

file attributes

Restrictive labels attached to files that describe and regulate their use.

Examples of file attributes include hidden, system, read-only, <u>archive</u>, and so forth. In <u>MS-DOS</u>, file attributes are stored in the file's directory entry.

file fragmentation

A frequent condition in which files are separated on a disk into small, separated fragments.

File fragmentation is a natural consequence of creating, deleting, or modifying files on a disk over time. When a file is saved on a crowded disk that no longer contains contiguous blocks of free space large enough to hold it, the file is automatically split into two or more chunks, or fragments, and placed on separate parts of the disk. If left untreated, file fragmentation can slow down a disk's access speed. The Windows 95 utility Disk Defragmenter can detect and fix file fragmentation problems.

file name

The name the user gives to a file for purposes of identification and storage.

In MS-DOS and Windows 3.1, a file name can contain up to eight characters followed by a period (.) and an extension of up to three letters. In Windows 95, file names can be as long as 256 characters.

file name extension

In MS-DOS computers, the portion of a file name following the point (.) that indicates the kind of data stored in the file.

File name extensions are usually limited to three letters in length. They can be assigned by the user, as in the file name DATA.OLD, or they can be assigned by (and have special meaning to) a program, as in the case of Microsoft Word, which automatically assigns its documents the extension DOC. Other examples include "c" for C source code, "ps" for Postscript files, and "txt" for arbitrary text.

FTP

Acronym for **File Transfer Protocol**, a standard that allows a single computer to transfer files to and from another computer over a TCP/IP network.

GPF

Acronym for ***General Protection Fault***, an addressing error caught by the CPU's memory protection hardware.

A GPF occurs when a program tries to access memory that doesn't belong to it. A GPF can be serious because the operating system closes down to protect its own integrity at the expense of the user's data. GPFs cannot be attributed to any expected condition. Although these errors occur due to conflicts in memory. installing additional memory will not prevent the problem.

graphics accelerator

A video adapter containing its own processor to increase performance levels.

Graphics adapters free up your computer's CPU to execute commands, leaving the graphics accelerator responsible for all graphics computations. The increasing popularity of multimedia applications has made graphics accelerators a necessity for most computer users today.

GUI

Acronym for ***graphical user interface***, an interface designed to make a computer easier to use by using picture <u>icon</u>s instead of a command line for user input.

The first GUI was designed by Xerox in the 1970s. However, due to the high cost of the advanced hardware required, GUIs did not become an industry standard until the advent of the Apple Macintosh in the 1980s.

handshake

The agreement between two modems on the [protocol](#) to use when communicating. With faster modems (14.4 [kbps](#) and faster) handshaking is done by the hardware, so you don't have to adjust the protocol.

hard disk

A fixed magnetic disk on which computer data is stored.

A hard disk is composed of several platters stacked atop one another. Hard disks are considerably faster than floppy disks, with access time of 15 milliseconds or less. Moreover, while floppy disks typically contain 1.4 megabytes, today's hard disks often have capacities exceeding 1 gigabyte.

hardware profile

A list of all the hardware comprising a particular system, including its make and model. Software programs must be provided with a hardware profile in order to know how to communicate with various hardware components successfully.

hexadecimal

Refers to the base-16 number system, which is made up of the numbers 0 through 9 and the letters A through F.

The hexadecimal numbering system is often used by programmers to represent bit-masks, machine addresses, and other low-level constants. It is particularly well-suited to computers because it can represent a single byte (8 bits, or one character) as two consecutive hexadecimal digits.

hidden file

(see also file attributes)

A file with the hidden attribute activated so that it does not appear in a normal listing of the files contained in a directory.

Certain files critical to the operating system are generally hidden so that the user will not accidentally corrupt or delete them. In MS-DOS these files include MSDOS.SYS and IO.SYS. The user can hide and unhide any file manually by changing its attributes.

HIMEM

An extended memory manager that comes with MS-DOS version 5.0 or higher.

hot key

A single key or combination of keys that perform a function which would otherwise require several key strokes or mouse movements.

Hot keys can be user-defined or they can be built into programs so that frequent users can work directly from the keyboard and not rely upon a mouse. Virtually all of Windows 95's basic functions and most application functions can be executed using hot keys rather than mouse clicks. For example, Ctrl+C usually copies selected objects to the clipboard and Ctrl+V pastes the contents of the clipboard. In MS-DOS systems, you can use hot keys to switch to a memory-resident program (TSR) such as a pop-up calculator, notepad, or antivirus. The key is called "hot" because the program it switches to is ready and waiting, or warmed up.

HTML

Acronym for ***hypertext*** *markup language*, the language used to author or create [document](#)s on the [World Wide Web](#).

hypertext

A system in which objects (e.g. graphics, sound, video, text, programs) can be connected to one another.

Because these various objects are connected, they can be accessed from within one another by clicking a hypertext link. For example, you might click on the phrase *Civil War* and be connected to pictures, text, and videos concerning the Civil War. Hypertext is useful for browsing through databases with large amounts of information, such as this glossary.

IBM PC

This term is most often used in a broad sense to include only those computers produced by IBM, but the greater family of computers that conform to the IBM-compatible specification.

The IBM PC standard accounts for over 80 percent of all computers in existence today. These computers are variously called IBM clones, IBM compatibles, or simply compatibles.

icons

Small pictures that represent commands, files, or windows.

IDE

Acronym for *Integrated Drive Electronics*, a type of disk drive interface.

In IDE interfaces, the controller electronics are contained within the drive itself, thereby eliminating the need for a separate adapter card. The IDE interface was invented by Compaq in 1986.

INI

A file name extension used to indicate files containing configuration information for applications or for Windows itself.

.INI files are generally used to store values used by a program when it is run, installed or accessed by the user. The .INI file plays an important role in Windows 3.1, but most of its functions have been replaced by the Windows registry in Windows 95.

ink-jet printer

Prints by spraying ionized ink at a sheet of paper.   The ink is directed by magnetized plates to form desired shapes and are capable of producing high quality print.

Ink-jet printers generally provide a resolution of 300 dots per inch, although some newer models offer higher resolutions.   One drawback is, since they require a special type of ink, the printed page is inclined to smudge if inexpensive copier paper is used.

interlacing

A monitor display technique in which the electron guns draw only half the horizontal lines with each pass (i.e., all odd lines on one pass and all even lines on the next pass).

Because an interlacing monitor refreshes only half the lines at one time, it can display twice as many lines per refresh cycle, which results in greater resolution. However, the reaction time of interlacing is relatively slow, so programs that depend on quick refresh rates (i.e., animation and video) may experience flickering or streaking. Generally speaking, non-interlacing monitors perform better than interlacing monitors of the same resolution.

Internet

Abbreviation for *Internetwork*.

Generically speaking, an Internet is any set of computer networks joined together through gateways that handle data transfer. When capitalized, the term refers to the collection of networks and gateways that use the TCP/IP suite of protocols. The Internet currently has over 30 million users worldwide.

ISP

(*see also* on-line service)

Acronym for **Internet Service Provider**, a term used for any organization that provides access to the Internet.

IRQ

Acronym for ***interrupt request line***, a hardware line over which devices like I/O ports, printers and disk drives can send interrupt signals (requests for service) to the CPU.

IRQs are part of the computer's internal hardware. There are a limited number of IRQs, and each one is rated in a hierarchy so that the CPU can determine the relative importance of competing requests.

jumper

A metal bridge that allows an electrical circuit to function.

Typically, a jumper consists of a small plastic two-pronged female plug that fits over a pair of protruding pins to configure various hardware devices (e.g., expansion boards, sound cards, hard drives).   Changing the placement of a jumper plug by placing it over a different set of pins will change the board's parameters.

kbps

(*see also* baud rate)

Kilobits per second, a measurement of modem speed.

Most modems available on the market operate at speeds of either 14.4 kbps or 28.8 kbps.

kilobyte (KB)

(*see also* bit, byte)

Unit of measure for memory equal to 1,024 bytes.

On the surface, a kilobyte appears to be 1,000 bytes. In fact, it's 1,024 bytes. This has to do with the fact that all computers use the binary system and use multiples of 8. Therefore, a megabyte (MB) is 1,048,576 bytes, a gigabyte (GB) 1,073,741,824 bytes, and a terabyte, still chiefly a theoretical number, represents over a trillion bytes: 1,099,511,627,776.

LAN

Acronym for ***local area [network]***, a group of computers and other devices covering a limited area that interact throughout a common communications link.

LANs are generally comprised of microcomputers and a limited number of shared devices such as [laser printer]s and disk drives. In order to connect to a LAN, each computer must use a certain data-link and communications [protocol]. LANs are usually small-to-medium-sized office networks or large networks contained within a single physical location.

laser printer

A printer that uses a laser beam to produce an image on an electrically charged drum, which is then rolled through a reservoir of toner and transferred to the paper through a combination of heat and pressure.

Most laser printers offer resolutions ranging from 300   to 1,200 dpi (dots per inch), and are capable of printing an almost unlimited variety of fonts. All laser printers are equipped with built-in RAM, which in most cases can supplemented. For a 600-dpi graphic output, you need at least 4 MB   of RAM. Laser printers are much quieter than dot-matrix or daisy-wheel printers because they print using a "nonimpact" technology.

LCD

Acronym for *liquid crystal display*, a display technology typically used in digital watches and portable computers.

LCDs utilize two flat layers of polarizing material with a liquid crystal solution sandwiched between. An electric current is then passed through the liquid which causes the crystals to align, essentially blocking the light. Although the quality of   the LCD is inferior to other display technologies, its low power consumption still makes it a popular choice for many portable electronic devices.

local bus

A data bus that connects a processor to memory.

Although local buses support only a few devices, they decrease substantially the amount of time needed to process data.   Most computers have both a local bus (for video data), as well as a more general expansion bus for other devices that do not require processing time to be quite as fast.

logging off

Also called logoff or logout, logging off is the process of terminating a session with a computer accessed through a communications line. Logging off is not the same thing as shutting off the computer.

logging on

Also called logon or login, logging on is the process of identifying oneself to a computer after connecting to it over a communications line. When logging on, the computer usually requests the user's name and password.

maximize

In Microsoft Windows, the act of increasing the size of a window so that it fills the entire screen.

You can maximize a window by double-clicking on its title bar or by clicking the maximize button, which is a picture of a square. In Windows 95, the maximize button is the middle button on the upper right corner of the window.

MCA

(*see also* bus)

Acronym for **Micro Channel Architecture,** a bus architecture for older computers.

MCA was introduced by IBM in 1987. It was designed to take the place of the older AT bus used on IBM PC-ATs and compatibles. The industry, however, never accepted the new design.

MemMaker

(*see also* device driver, TSR)

An application that optimizes computer memory by moving device drivers and memory-resident programs (TSRs) into upper memory.

The system to be optimized must have extended memory available in order for MemMaker to run.

memory

(*see also* RAM)

Broadly speaking, memory can refer to external storage systems such as disk drives, but in most cases it refers to the amount of random access memory (RAM) in your computer.

memory address

(*see also* byte)

A specific location where data can be found, usually in main memory or on a disk.

Memory is somewhat like an array of storage bins, each identified by a unique numbered address.   By specifying a memory address, programmers can access a particular byte of data.   Disks are divided into tracks and sectors, each of which has a unique address. Usually, you do not need to worry about addresses unless you are a programmer.

memory cards

A plug-in hardware component containing supplemental RAM (random access memory) chips that can be used to store data or programs.

MHz

Short for *megahertz*. One MHz represents one million cycles per second.

"Clock speed" or the speed at which microprocessors can execute commands is measured in megahertz.   For example, a computer with a clock speed of   75MHz executes 75million cycles per second or 75 million instructions per second.

MIDI

Acronym for *Musical Instrument Digital Interface*, a hardware specification and communication standard adopted by the electronic music industry that represents and transmits sounds, enabling music synthesizers and musical instruments to communicate with computers.

minimize

In Microsoft Windows, the act of shrinking a window to the size of its icon.

When a window is minimized, it still runs (i.e. it still resides in RAM) but it no longer takes up space on the screen. You minimize a window by clicking the minimize button, which is a picture of a horizontal line. In Windows 95, the minimize button is the leftmost button on the upper right corner of the window.

modem

(*see also* handshake)

Short for ***modulator/demodulator***, a modem translates data into tones which it uses to communicate with other modems over a telephone line. To do this, both modems must be using the same protocols.

MS-DOS

Acronym for ***Microsoft Disk Operating System***.

The original MS-DOS, closely based on the older CP/M operating system,   was designed by Tim Patterson for the Intel 8088-based IBM PC. Also known as PC-DOS or simply as DOS, MS-DOS is a single-user operating system with a command-line interface that runs one program at a time and is limited to working with one megabyte of memory. Newer operating systems such as Windows 95 and OS/2 Warp do not depend on DOS, although they are compatible with DOS-based programs.

MSN

(*see also* ISP)

Acronym for the **Microsoft *Network***, Microsoft's Internet service provider (ISP).

multitasking

The ability to execute more than one task (program) at the same time.

Multitasking refers to the actions of a single computer that switches from one program to another so quickly that it can run programs simultaneously. There are two basic types of multitasking: preemptive and cooperative. In preemptive multitasking, the operating system (OS/2, UNIX, Windows 95, and Windows NT) parcels out CPU time slices to each program. In cooperative multitasking (Windows 3.1 and Macintosh), each program can control the CPU for as long as it needs to.

network server

A computer running administrative software that provides some service for other computers connected to it via a network.

A server makes resources, such as printers and disk drives, available to computers acting as workstations (or clients) on a network.

node

Any device connected to a network and capable of communicating with other network devices. A node can be a computer or a shared resource such as a printer or disk drive.

OLE

Acronym for ***Object Linking and Embedding***, OLE is a way to transfer and share information among different applications.

When an object (such as a graph generated by a spreadsheet) is linked to a compound <u>document</u> (such as a report generated by a software program) the document contains only a reference to that object; any changes made to the contents of the linked object will be seen in the compound document.

on-line/off-line

The condition of being actively connected (on-line) or disconnected (off-line) to a printer, a local <u>network</u>, or a remote computer or network such as the <u>Internet</u>.

on-line service

A business that provides subscribers with a wide variety of services and content.

On-line services provide an environment in which subscribers can communicate with one another, either by exchanging e-mail messages or by participating in on-line conferences (forums). In addition, the service provides users with third-party information such as stock quotes, news stories, magazine and newspaper articles, and so on. All of the major on-line services—America On-Line (AOL), CompuServe, Prodigy, and Microsoft Network (MSN)—charge a monthly subscription fee for use of their service. The Internet is not an on-line service *per se* because it is not centrally controlled by any one organization and is not operated for profit.

operating system (OS)

The programs or collections of programs which act as translators between a computer's processing chips and programs designed to run on them.

The operating system is the most fundamental piece of software on a computer. It manages basic computer operations like disk input and output, video support, keyboard control, and many internal functions related to program execution and file maintenance. Examples of operating systems include CP/M, DOS, Novell NetWare, Windows 95, Windows NT, OS/2 Warp, UNIX and Macintosh's OS 7.0.

OS/2

Operating system developed by IBM and Microsoft Corporation as a successor to MS-DOS for IBM PC compatibles.

OS/2 is a single-user multitasking operating system that can run existing MS-DOS applications. After the release of OS/2 version 1.x, IBM and Microsoft parted ways. IBM went on to develop subsequent versions of OS/2, while Microsoft developed what was eventually to become Windows NT.

parallel port

(*see also* port,   COM port)

A hardware channel for connecting to an external parallel device, such as a printer.
Parallel ports use 25-pin connectors and are used almost exclusively by printers.

password

A security measure used to restrict access to computer systems and/or sensitive files.

Passwords usually take the form of a unique string of characters selected by the user as an identification code.   After typing the password, if the system recognizes it as legitimate the user gains access to the secured location.

path

The route an operating system follows in order to find, store, and retrieve specific files on a disk.

A path includes the drive, directory, subdirectory, folders and subfolders that contain a file.   For example, C:\Program Files\CyberMedia First Aid\FAP32.exe is the path taken to access the First Aid program, where Program Files is the directory, CyberMedia First Aid is the subdirectory and FAP32.exe the actual file.

peripheral

Also known as a component or peripheral device, a peripheral is any piece of hardware attached directly or indirectly to your computer.

Peripherals include keyboards, display monitors, mice, printers, microphones, speakers, etc.

Plug and Play

A feature offered by the Windows 95 operating system which allows for on-the-fly plug-in and removal of peripheral hardware.

The idea behind Plug and Play is that both the BIOS and operating system cooperate in attempting to identify new pieces of hardware, and pre-configure them to eliminate the possibility of conflict between devices. Plug and Play might have been a stock term for describing hardware or software that pops into a computer and configures itself with little or no user intervention, but Phoenix Technologies, Compaq and Intel have trademarked the term, hoping it becomes a way of life for computer users. However, Plug and Play is not something that comes standard with every computer, a fact which has created a great deal of confusion and frustration among computer users.

pixel

Short for *picture element*, a single point in a graphic image.

The quality of a monitor often depends on its resolution, that is, how many pixels it is capable of displaying.   VGA monitors display 640 x 480 (approx. 300,000 pixels).   SVGA monitors display 1,024 x 768 (approx. 800,000 pixels). True Color monitors utilize 24 bits per pixel, making it possible to display more than 16 million different colors.   Pixels are arranged in rows and columns, close enough together to appear connected.   Each pixel on a color monitor is actually composed of a red, a blue, and a green dot.   However, when the three dots do not accurately converge, the resulting picture appears fuzzy.

port

Also known as I/O (input/output) port, a channel through which data is transferred between the CPU and a peripheral device such as a printer,. Examples of ports include parallel port, serial (COM) port, and game port. A port   is a physical location (usually in the back of the computer) into which you plug peripheral equipment.

protected mode

A type of memory utilization available on Intel 80286-and-later model microprocessors.

Protected mode allows each program to be allocated a unique section of memory, and thus protect it from interference from other programs. It also allows multitasking, which enables the microprocessor to switch from one program to another so the computer can execute several programs at once. Only sophisticated operating systems such as OS/2, Windows 95, and UNIX can run in protected mode. DOS, for example, cannot support the protected mode feature directly.

protocol

(*see also* handshake)

The speed, number of stop bits, and other data used by a modem to send information. In order to communicate successfully, the sending and receiving modems must use the same protocol.

PS/2

IBM's second generation of personal computers.

The PS/2 series introduced three advances over the PC series: 3.5" 1.44 <u>megabyte</u> floppy disks, <u>VGA</u> display standards, and the <u>MCA</u> or *Micro Channel Architecture*.

QWERTY keyboard

The term denoting the original arrangement of letters on a typewriter. The word is derived from the first six characters on the top alphabetic line of a standard typewriter.

Designed in 1868 by Christopher Sholes, the inventor of the typewriter. According to popular myth, Sholes arranged the keys in their odd fashion to prevent jamming on mechanical typewriters.   With the advent of electric typewriters and computers, where jamming is not an issue, new keyboards specifically designed for speed typing have been invented. The best-known is the Dvorak keyboard.

RAM

Acronym for ***random access memory***, the type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes.

RAM has many other names, such as *main memory* and *system memory*. The word "random" is used because RAM chips are designed to be accessed at any point by the CPU with virtually the same amount of speed. The 500,000th bit of a one megabit chip can be accessed as quickly as the first bit.   RAM differs from ROM (read-only memory) in that RAM can be erased and rewritten thousands of times a second whereas data in ROM is permanent.

Recycle Bin

Application in Microsoft Windows 95 that acts as a safeguard by automatically saving a copy of deleted files. Using the recycle bin, the user can either recover previously deleted files or permanently delete them.

registry

A collective term for System.dat and User.dat, two critical system files used by Windows 95 to store a wide range of information. In previous versions of Windows, most of the information in these two files was contained in the Win.ini and System.ini system files.

ROM

Acronym for ***read-only memory***, which is <u>memory</u> that can only be read and not be removed.

ROM, referred to as non-volatile storage, retains its contents even after the computer has been shut down. Typical ROM includes critical programs such as the program that <u>boot the computer</u>. In addition, ROMs are used in calculators, <u>semiconductor</u> integrated circuit memories, CD's and <u>peripheral</u> devices such as <u>laser printer</u>s, whose fonts are often stored in ROMs.   <u>RAM</u>, on the other hand, is volatile.

RTF

Abbreviation for *Rich Text Format*, a standard developed by Microsoft Corporation for specifying formatting of documents.

RTF files are actually ASCII files with special commands that includes information about formatting (i.e., fonts and margins).

safe mode

Start-up method suggested by Windows 95 in the event of an emergency shut down.

In safe mode, default settings are used to boot the computer with the minimum number of device drivers required to start Windows. You will not have access to CD-ROM drives, printers, or other devices. To enter Safe Mode, press F8 when you see the message "Starting Windows 95."

ScanDisk

A utility program that you can use to scan a disk for defects and repair many of those defects.

Both DOS and Windows 95 include a version of ScanDisk. It is important to use the Windows 95 version because older versions do not ensure the security of long file names.

screen capture

The act of copying what is currently displayed on a screen to a file or printer.

If the system is in graphics mode, the screen capture will result in a graphics file containing a <u>bit map</u> of the image. If the system is in text mode, the screen capture will normally load a file with <u>ASCII</u> codes.   To activate "screen capture", press ***Alt-Print Scrn***. The file will automatically be copied to the <u>clipboard</u> in <u>Windows 95</u> for further access.

screen flicker

The apparent flickering of the display screen usually in connection with the monitor's refresh rate, or the speed with which the screen is redrawn.

semiconductor

A material which allows current to flow under certain circumstances.

Computer [chip](#)s, both for [CPU](#) and [memory](#), are composed of semiconductor materials. Typically crystalline, the most common semiconductor materials are silicon, arsenate, gallium and geranium. Semiconductors make it possible to miniaturize electronic components which means they take up less space, are faster and require less energy.

SCSI

Acronym for ***Small Computer System Interface***, pronounced "scuzzy," a parallel interface for attaching peripheral devices to computers.

Developed by Shugart Associates, SCSI devices provide interfacing between a computer and its hardware devices (i.e., hard disks, floppy disks, CD-ROM, printers, scanners etc.).   SCSI-based systems can connect up to 7 devices to a single controller on the computer's bus via 50-pin ribbon cables.

shell

Another term for "command processor interface" or the outermost layer of a program.

The shell is a set of commands or menus through which a user communicates with a program.   After verifying the validity of the commands, the shell then sends them to another part of the command processor to be carried out.

SIMM

Acronym for *Single In-line Memory Module*.

A small circuit board (typically 10cm x 2cm), with RAM integrated circuits on one or both sides and a single row of pins along one long edge. One SIMM typically holds 2 MB or 4 MB and is easier to install than individual memory chips.

SIPP

Acronym for *Single In-line Pin Package*.   An integrated circuit package with a single line of pins.

sound card

An expansion board (or, in the case of a laptop, a PC card) that enables a computer to produce and recognize sound.

Sound cards produce sound through speakers connected to the card and record sound through a microphone connected to the computer. Nearly all sound cards support MIDI, a standard for representing music electronically.

SRAM

Acronym for **_static random access _memory_**:   The term "static" comes from the fact that it needs to be refreshed less often than dynamic RAM.

SRAM is used for the 64K to 256K "external cache" on the motherboard.   It is also used as the sole type of RAM on some high-performance "dynamic cache architecture" motherboards. SRAM is faster and more reliable than the more common DRAM (dynamic RAM).

surge protector

An electrical outlet or power strip that protects the computer's circuitry from power surges.

All computers come with some surge protection built in, but it is a good idea to purchase a separate device.   It's also recommended to use a grounded (3-prong) plug. In fact, never use an adapter unless it is properly grounded.   The most effective form of surge protection is a UPS or uninterruptible power supply.

SVGA

(*see also* VGA)

Acronym for **super video graphics array** or **super VGA**.

A video display standard created by VESA (Video Electronics Standards Association) for IBM PC compatible personal computers designed to offer greater resolution than VGA. There are several varieties of SVGA, each providing a different resolution: 800 x 600 pixels, 1024 x768 pixels, 1280 x1024 pixels, or 1600 x1200 pixels.   All SVGA monitors can support a palette of 16 million colors, however the number of colors that can be simultaneously displayed is limited by the amount of video memory installed.

swap file

A hidden file used by the Windows operating system for swapping segments of data memory to disk.

Swapping is a useful technique that enables a computer to execute programs and manipulate data files larger than the main memory.   It copies as much data as possible into main memory, and leaves the rest on the disk. Whenever the operating system needs additional data from the disk, it exchanges a portion from the main memory with a portion of data on the disk.

system files

Files the computer automatically loads while booting up.

These important files transmit instructions to the computer concerning the use of memory, the location of essential files, and what software and hardware is configured for your system.

taskbar

The taskbar is an important feature of the [Windows 95](#) [desktop](#). It contains the Start button, which brings up a menu from which you can start applications, open [documents](#), and open the [Control Panel](#) and Explorer. It   also acts as a task-switcher, enabling you to switch between running applications, which appear on the taskbar itself as [icons](#). To switch to a particular application, just click on its button on the taskbar. The right edge of the taskbar, called the tray, displays various status indicators, such as the current time and the Windows Guardian icon.

TCP/IP

Acronym for *Transport Control Protocol/Internet Protocol*. The standard protocol used to connect to a network server or Internet service provider by dialing in over a telephone line.

This communications protocol was originally developed by the Department of Defense.   TCP/IP is actually two separate protocols (TCP and IP) however, they are almost always used together.   Any computer accessing the Internet probably uses this protocol.

text editor

A program that allows you to write and edit files that do not require formatting.

Text editors, such as Notepad and WordPad, save text is ASCII (text-only) format. Since system files like Config.sys and Autoexec.bat are ASCII files, they should be altered using a text editor.

thermal printer

Thermal printers print   by pushing electrically heated pins against heat-sensitive paper.

These printers generally produce low quality output. They are used mostly in calculators and fax machines.

TSR

Acronym for **Terminate and Stay Resident**.   A type of DOS utility which, once loaded, will remain in memory.

Calendars, calculators, spell checkers, thesauruses, and notepads are often set up as TSRs so they can instantly be accessed from within another program. TSRs are sometimes called pop-up programs.   TSRs also reduce the amount of memory available. Furthermore, not all TSRs interact well with each other and difficulties may arise if too many TSRs are kept in main memory at once.

UART

Acronym for ***universal asynchronous receiver/transmitter***, an integrated circuit used for serial communications.

Every computer contains a UART to manage its serial ports, and all internal modems contain their own UART.   As modems increase in speed, the UART has become suspect as the cause of transmission traffic jams. So, when purchasing a fast external modem, check to make sure that the computers' UART can handle the maximum transmission rate.

UNIX

Operating system created at Bell Laboratories.

UNIX was based on the C language and engineered for portability across hardware platforms and is considered to be the most flexible and powerful operating system in existence today. There are two major types of UNIX: System V, developed by AT&T, and BSD 4.x, created at the University of California at Berkeley.   The former is the basis for most high-end corporate and industrial UNIX systems, while the latter is the popular choice with smaller businesses and institutions.   UNIX is rarely used on home computers, but its use is growing as computers grow more powerful.

UPS

Acronym for ***uninterruptible power supply***.   UPS is a power supply that includes a battery to maintain power in the event of a power outage.

Typically, a UPS keeps a computer up and running for several minutes even after a power outage, enabling the user to save his data and shut down the computer properly. There are two basic UPS systems: SPS, or standby power systems, and on-line UPS systems.

URL

Acronym for Uniform Resource Locator, a standard for specifying a location on the Internet.

URLs are essentially addresses of destinations on the Internet. Used extensively on the World Wide Web, URLs can be accessed from HTML documents by clicking a hypertext link. Here is CyberMedia's URL:

http://www.cybermedia.com/

utility

A program that performs a specific task, most often related to managing system resources.

Unlike applications, such as word processors and spreadsheets, utilities are generally smaller and designed to perform a single task or series of tasks. Examples of utilities include antivirus programs, file managers, memory managers, and so on. Operating systems usually contain a number of utilities. Windows 95, for example,   includes ScanDisk, Disk Defragmenter, Explorer, Backup, and many others.

VESA

Acronym for ***Video Electronics Standards Association***, a consortium of manufacturers whose goal is to standardize video [protocol](#)s.

VGA

Acronym for **_video graphics array_**, the very first product name of IBM's display board.

A display standard for IBM PCs, with 640 x 480 pixels in 16 colors and a 4:3 aspect ratio. There is also a text mode with 720 x 400 pixels. Previous versions included the color graphics adapter (CGA) and the enhanced graphics adapter (EGA).

virtual

A term often used in the computer industry to indicate that which is *not real*. It distinguishes the conceptual from that which is tangible. For example, a computer aided design image of a car is virtual, as opposed to the physical car itself, which is real.

virtual memory

An imaginary memory area supported by Windows (not DOS) which is used as a substitute for physical memory when there is not enough physical memory available.

Actually, "virtual" memory is a misnomer.   It is "real" memory, since the hard disk is used in exactly the same way as memory chips are.   But because of the difference in access speed between the swap file memory (where virtual memory is stored) and actual machine memory, the data on the hard disk is referred to as "virtual" memory.   Windows 3.1 and Windows 95 use virtual memory dynamically, by varying the swap file size as the needs of the system change.   If the size is fixed by the user, it then becomes a permanent swap file.

virus

A computer program that replicates itself, written with the intention of damaging your computer without your knowledge.

Viruses are often spread inadvertently when computer users exchange computer data or communicate with other computers over a communications link. Some viruses do their damage by reproducing until they occupy all available memory. Other viruses can do more severe damage by deleting files or even reformatting your entire hard disk. To combat viruses, antivirus programs were developed to detect and remove known virus types.

VxD

Acronym for ***virtual "something" driver*** where the "something" is a real or <u>virtual</u> device.

A virtual device can be a real device, such as your keyboard, or it can be an additional feature or service provided by the VxD, such as anti<u>virus</u> protection. VxDs are a vital component of <u>Windows</u>. They are complicated programs that access the very heart of the <u>operating system</u>.

WAV

A sound format developed by Microsoft, used extensively in Microsoft Windows.

window

A subdivided area of the monitor display screen.

Windows

General term for Microsoft Windows, a multitasking graphical user interface environment that was originally developed to run on MS-DOS-based computers.

When Windows was first introduced in 1985, it was so slow it garnered the nickname "Windoze." In contrast to earlier versions of Windows, Windows 95 is a complete operating system rather than a graphical user interface (GUI) running on top of MS-DOS. Windows 95 provides 32-bit application support, pre-preemptive multitasking, and built-in networking.   It includes MS-DOS 7.0, but does not depend on it to operate.

Windows NT

Microsoft's [32-bit](#) [multitasking](#) [operating system](#) designed for high performance [network](#)-based computing.   NT stands for New Technology.

World Wide Web (WWW)

A series of Internet network servers that support documents formatted in HTML. Each document, or web page, can access other web pages, as well as graphics, video and audio files, thereby creating a "web."

The World Wide Web originated from the CERN High-Energy Physics laboratories in Geneva, Switzerland. It was introduced to the public in 1991, and since that time the number of users has mushroomed. Every web page has its own address, called a URL.

WYSIWYG

Acronym for *what you see is what you get*.

A general term that refers to feature in software programs—usually word processors or desktop publishing products—that lets the user see on screen exactly what will be printed. Programs without WYSIWYG are unable to display different fonts and graphics on screen even though the correct codes have been inserted into the file.

XMS

Acronym for *Extended Memory Specification*, a procedure describing the use of extended memory for storing data.

zip files

A [data compression](#) format for computers.

PKZIP and PKUNZIP are [DOS](#) utilities for compression and expansion of files. Files that have been compressed with PKZIP end with a .ZIP extension.   WinZip is the [Windows](#) version. Zip files can be transported and stored more efficiently than ordinary files simply because they occupy less disk space.

ZIF socket

Acronym for *zero insertion force* socket.

A chip socket that allows insertion and removal without the use of special tools. ZIF sockets are used where chips must be inserted and removed frequently, such as in test equipment. They are more expensive and usually take up more space than conventional sockets.