ADSL (Asymmetrical Digital Subscriber Line)

A method of compressing video signals on phone lines.

ALCNet (Alcohol network)

A computer network for alcoholics.

MMURTL (Message-based, multitasking, real-time kernel)

Pronounced Myrtle. The name of an operating system.

MOTD (Message of the day)

Pronounced *mot-dee*. Used by the system administrator in Unix to send notices to users.

SCARCNet (Smoking Control Advocacy Resource Network)

An anti-smoking BBS. The tobacco industry is attempting to have the membership list subpoenaed.

SS7 (Signalling System Seven)

A telephone system which allows special features, such as caller ID, return call, and repeat calling.

Davis, Bernard

Co-founder of Ziff-Davis Publishing Co. with William B. Ziff, Sr.

Grohs, Conrad

Arrested for allegedly using computer networks to meet rich women and swindle their money.

Hippeau, Eric

New chairman of Ziff-Davis Publishing Co., replacing William B. Ziff, Jr., in November, 1993.

Lafaro, Michael

A consultant charged with computer tampering in New York for allegedly attempting to disable a program he installed for Forecast Installations after they failed to pay the bill.

Torvalds, Linus

The author of Linux, a Unix operating system.

Ziff, Dirk

Son of William B. Ziff, Jr., and participant in the family's magazine industry.

Ziff, Robert

Son of William B. Ziff, Jr., participant in the family's magazine industry.

Ziff, William, B., Jr.

Took his father's magazine industry and concentrated it on computer magazines (Computer Gaming World/Kids and Computers, Computer Shopper, MacUser, MacWeek, PC Computing, PC Magazine, and PC Week).

Ziff, William B., Sr.

Co-founder of Ziff-Davis Publishing Co. with Bernard Davis.

*

Asterisk. A wildcard in Unix, as well as DOS, which means "all the files."

Percent Sign. One of two <u>Unix</u> prompts. The other is \$.

••

In $\underline{\text{FTP}}$ (also in DOS), stands for the parent, or previous, directory. For example, $\mathbf{cd..}$ means to change directories to the parent directory.

Control Q. An \underline{IRC} command in $\underline{V\!AX}$ systems which resumes a scrolling screen that has been stopped with ^S.

Control S. An \underline{IRC} command in \underline{VAX} systems which stops a scrolling screen.

/bye

An IRC command to leave a channel.

/ctcp (Client-to-Client Protocol)

An $\underline{\mathsf{IRC}}$ command which allows you to get additional information about someone by adding finger or userinfo commands.

/help

An <u>IRC</u> command to get help.

/join

An IRC command to join a channel.

/list

An <u>IRC</u> command that lists which <u>channels</u> are available.

/list -min

An $\underline{\mathsf{IRC}}$ command that lists available IRC $\underline{\mathsf{channels}}$ which have at least six participants.

/me

An <u>IRC</u> command which inserts your nickname into a sentence.

/nick (Nickname)

An <u>IRC</u> command to give yourself a nickname.

/query

An <u>IRC</u> command which limits conversations to a limited number of people.

/set hold_mode

An $\underline{\mbox{IRD}}$ command to pause output a screenful at a time.

/sign

An <u>IRC</u> command to sign off a <u>channel</u>.

/status

An $\underline{\mathsf{IRC}}$ command on $\underline{\mathsf{VAX}}$ systems to display a status line.

/who

An <u>IRC</u> command which displays who is on a <u>channel</u>.

/whois

An $\underline{\mathsf{IRC}}$ command which provides additional information about a particular user.

bye

An <u>FTP</u> command on <u>Internet</u> which signs you off.

Capture

The name of a subdirectory used by many people for screen captures.

cat (Catenate)

A $\underline{\text{Unix}}$ command which displays the contents of a file. Similar to the $\underline{\text{DOS}}$ TYPE command.

Channel

In \underline{IRC} , an area of conversation. Similar to a SIG (special interest group). Each channel is generally intended for a specific topic.

Child Process

In multiprocessing, when two or more parts of the same program are run at the same time, a part which is not the main part of the program.

chmod (Change Mode)

A <u>Unix</u> command which determines who can access a file.

Class Printing

Software which divides the available printers into classes, and then uses the least busy one of a class.

compress

A <u>Unix</u> command which compresses files.

cp (Copy)

A <u>Unix</u> command to copy files.

Cryptanalysis

Code breaking.

Cryptography

Code making.

CSV (Comma-Separated Variable)

A text database file in which the variables are separated by commas.

Cybergesture

Holding up one's virtual reality headmount so that it does not slip down one's nose.

dir (Directory)

An $\underline{\mathsf{FTP}}$ and $\underline{\mathsf{DOS}}$ command which gives a directory listing of files.

DOS 6.21

The result of a court settlement. It is the same as DOS 6.2, but without DBLSPACE. A court has ruled that Microsoft violated two patents owned by Stac Electronics, the owners of Stacker, and had to cease distributing DBLSPACE.

emacs (Editing Macros)

A program editor for <u>Unix.</u>

finger

An $\underline{\text{Internet}}$ command that lets you see who is online at a location, or get additional information about someone.

FTP>

The <u>FTP</u> prompt.

Filename Lengths

In $\underline{\text{DOS}}$, 8 plus 3 characters. On the Macintosh, 31 characters. In $\underline{\text{Unix}}$, depending upon the version, 14 to 255 characters.

get

An <u>FTP</u> command which sends you a file.

grep (Globally Search for a Regular Expression and Print)

A <u>Unix</u> command which searches for text in files.

Home Directory

In <u>Unix</u>, the directory where you start.

Home Wave

From surfing a network. One's home network address.

HomeNet

A proposed network by Hearst.

Homework Helper

A proposed network by Infonautics.

Hyperprinting

Software which starts printing the first page before the last page is prepared.

Interactive Jobs Network

A proposed network by Watermark Systems.

Interchange

A proposed network by Ziff-Davis Interactive.

IRCNAME

A username or membername, possibly someone's real name. Not an $\underline{\text{IRC}}$ nickname.

Jaggies

An older type of computer image that has jagged edges.

Kerberos

An encryptian system.

Lag

The time delay it takes messages to cross a network.

less

A $\underline{\text{Unix}}$ command which performs the same function as the more command. (less is more.)

logout

A <u>Unix</u> command to quit a session.

Is (List Files)

A <u>Unix</u> and <u>FTP</u> command which lists files.

Is -aCF

A variation of the $\underline{\text{Is}}$ command which also displays hidden files and formats the output.

Lurk

To observe other network conversations without participating.

Luser (Loser User)

Someone who can't get things right on a computer.

man (Manual)

A $\underline{\text{Unix}}$ command which accesses the manual. It works similarly to the HELP command in $\underline{\text{DOS.}}$

Membername

The name one goes by on a network. Also, called *username*. It is available publicly, as opposed to a password, which should be a secret.

Mezzanine Bus

An intermediate <u>bus</u> between the processor bus and components.

more

A $\underline{\text{Unix}}$ command which displays the contents of a file one screenful at a time. $\underline{\text{DOS}}$ has a similar command with the same name.

mv (Move)

A <u>Unix</u> command to move files.

Namespace

An area in memory where a programming language compiler stores variable names.

Neutral Services

Part of an $\underline{\text{operating system}}$ which can be used by different types of interfaces. Thus, it is neutral.

Notwork

A <u>network</u> which is not working.

ONE BBSCON

Online Networking Exposition and BBS CONvention.

A proposed Intel chip with 6 million transistors, twice what the Pentium has.

P24T

The designation for a proposed Intel *overdrive* chip to upgrade a 486 to a Pentium.

P54C

The second-generation Pentium, which uses 0.6, instead of 0.8, micron technology.

Paradigm

A general concept of the way something should be done, possibly as set down by a *wizard* and held somewhat in awe by ordinary people.

Paradigm Shift

A change in a paradigm.

passwd (Password)

A <u>Unix</u> command which lets someone change her password.

Peer-to-Peer Network

A <u>network</u> which connects computers of equal status. Contrast with a client/server network in which one or more computers (servers) contain the central programming used by the others (clients). Peer-to-Peer networks are generally for smaller-sized networks than client/servers.

People

A proposed $\underline{\text{network}}$ by IBM in Japan.

PersonalLink

A proposed <u>network</u> by AT&T.

Pixelated

A poor and older type of computer image that shows the $\underline{\text{pixels}}$ and has jagged edges.

Potassium Hydroxide

A program that encrypts files on disks.

Power Luser

From *loser* and *user*. Someone who just can't get it right.

print

A command in $\underline{\text{Unix}}$ and $\underline{\text{DOS}}$ which prints a file.

pwd (Print Working Directory)

A $\underline{\text{Unix}}$ and $\underline{\text{FTP}}$ command which is similar to the $\underline{\text{DOS}}$ CD command when used without $\underline{\text{parameters.}}$ pwd displays the current directory on the video screen.

QNX

The name of a tiny operating system.

re (Rehi)

Hello, again.

rehi

Hello, again.

Reverse Engineering

A way of writing software that imitates other software, in order to duplicate the functionality without exactly copying the original program code. A finished version of the original software is analyzed to see how it works, and, then, new software is written that does the same thing in, usually, a somewhat different manner.

Reversed Pairs

When two wires are installed backwards.

rm (Remove)

A $\underline{\text{Unix}}$ command to remove files. Compare with the $\underline{\text{DOS}}$ commands ERASE and DELete.

rm*

A variation of the \underline{rm} command which means to remove all of the files.

Shiner

When the protective covering of a wire is scraped off and the wire shows.

Sniffer

A program which sniffs out passwords on a <u>network.</u> It surreptitiously intercepts them and stores them in a file for later use.

Sprite

A graphical image, heavily used in games, that moves. For example, a character or a missile.

stdout (Standard Output)

In $\underline{\text{DOS}}$ and programming, the default device that output will go to, which is the video screen. However, stdout can be redirected by programming and $\underline{\text{DOS}}$ commands to the printer, or a file, or another device.

System 7

The name of the operating system for the Macintosh.

talk

An <u>Internet</u> command that lets you communicate with another user.

Texel

A part of a graphical display that has texture, such as hair or fur.

Toon

A cartoon head representing someone on the ImagiNation Network.

uncompress

A <u>Unix</u> command to uncompress files.

userinfo

An <u>Internet</u> command which displays additional information about someone.

Username

The name one goes by on a network. Also, called *membername*. It is available publicly, as opposed to a password, which should be a secret.

Variable Clock

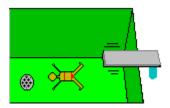
A programmable feature of the new Pentium chip which allows it to run at different speeds.

Visual Interface

A <u>Unix</u> text editor.

Workplace OS

IBM's Workplace Operating System which is under development.



HAC Glossary

Required skill: Ability to use <u>Windows Help System</u>, which this is. Suggestion: Select a match.





You have 30 days to try out this Shareware product. After that, you are required to register it.

This notice does not appear on registered versions.

Press a key or mouse button to continue.

Soon, you will be able to make a hypertext jump to a **HAC Main Table of Contents** that connects other HyperActive Components. Maybe, you already have it and maybe you don't. However, it did not exist when this first version of the HAC Glossary was released.

If you proceed and the HAC Main Table of Contents is not available, you will simply receive an error message and return to the HAC Glossary.

It does not hurt anything to try.

Proceed to HAC Main Table of Contents.

Before:

The HAC Glossary is copyrighted, 1994, by Chet Langin, Langin Software, 532 W. 3rd Street, Centralia, IL 62801-5407, USA.

All rights reserved. No warranty is expressed or implied. See trademarks.

HAC stands for HyperActive Components.

It is *Hyper* because it uses hypertext.

It is *Active* because it includes the latest information which is popularly available.

It is Components because it can be integrated with other software.

Go to **During.**

During:

The best way to access the glossary is to use the Search button.

See illustration.

This can involve three steps...

Step 1: Type in what you want to look up in the glossary.

Step 2: Select one of the listed keywords.

Step 3: Select one of the listed topics.

Go to After.

After:

The best way to get the latest and most complete version of the HAC Glossary is to register it. Future versions will contain corrections and refinements, if needed, and will add new acronyms, names, and terms to the glossary.

To obtain the latest version of the HAC Glossary, send \$9.95 plus \$4.00 shipping and handling to...

HAC Glossary Langin Software 532 W. 3rd St. Centralia, IL 62801-5407 USA

...or select Order Form.

If you would like to include the HAC Glossary with your own program, see <u>programming.</u>

Print order form.

HAC Glossary Order Form

Your Name:		
Address:		
Address:		
City, State, Zip:		
Ordering Fees: HAC Glossary Shipping and Handlin	\$ 9.95 ng <u>\$ 4.00</u> \$13.95	
Copies ordered:		
Total amount due:		
Sand to:		

Send to:

Langin Software 532 W. 3rd St. Centralia, IL 62801-5407 USA

Programming:

Print this topic.

You can access the HAC Glossary with programming code or via hypertext jumps from your own help files.

But, first, who is authorized to do this?

Shareware authors only may receive a license to distribute the HAC Glossary with their Shareware and registered versions for \$49.95 plus \$4.00 shipping and handling. This license is for unlimited distribution with up to five products by the same author. It does not include distribution of any other types of commercial versions of programs.

Any non-Shareware commercial distribution of the HAC Glossary requires a negotiated license. This includes all commercial software that is not the direct result of a user registering a Shareware product.

For more information, contact Langin Software, 532 W. 3rd St., Centralia, IL, 62801-5407, USA. 73770.615@compuserve.com.

How to do the programming:

The HAC Glossary can be called from programming code with the Windows WinHelp function. The Table of Contents has been given the arbitrary identifying value of 101. The below example, in C, assigns the value 101 to **Contents** and then calls the function...

#define Contents 101 WinHelp(hwnd,"HACGloss.HLP",HELP_CONTEXT,(DWORD)Contents);

The HAC Glossary is then launched as a separate entity from your software. This means that the HAC Glossary is not automatically terminated when your program is terminated. You have to specifically terminate the HAC Glossary with this command...

WinHelp(hwnd,"HACGloss.HLP",HELP_QUIT,NULL);

Other methods of accessing a help file from program code are available. See your programming manual for more information.

The best way of accessing the HAC Glossary is from your own help file. Topics can be called seamlessly from the glossary almost as though they were in your own file. Refer to your programming manuals on how to create your own help file.

After you know how to create your own hypertext jumps in a help file, the secret of accessing the HAC Glossary is determining what the glossary's context strings are. The term *Clipper Chip* will be used as an example.

First, start the HAC Glossary and use the Search button to go to the topic you are interested in. In this example, go to the *Clipper Chip* topic. At the top left corner of the topic, you will see the topic title in bold face. In this case, the topic title is *Clipper Chip*. This topic title is the basis for determining the context string.

Second, separate words in the topic title with the underline character. Thus, Clipper Chip becomes Clipper_Chip.

Third, add **D**_ to the beginning. Thus, **Clipper_Chip** becomes **D_Clipper_Chip**. The **D**_ stands for *definition*, as in the definition of the Clipper Chip.

Fourth, add **@HACGloss.HLP** to the end. So, **D_Clipper_Chip** becomes **D_Clipper_Chip@HACGloss.HLP**, which is the context string for the Clipper Chip topic. This context string means to access the definition of the Clipper Chip at the HACGloss.HLP file.

In some cases, characters are spelled out.

Here are some other examples...

The Shareware topic is accessed as D_Shareware@HACGloss.HLP

The Byte-Bonding topic is accessed as D Byte Bonding@HACGloss.HLP

The Barlow, John Perry topic is accessed as

D Barlow John Perry@HACGloss.HLP

The /bye topic is access as D_Slash_bye@HACGloss.HLP

Additional customizations can be made to the HAC Glossary by Langin Software. For example, specific definitions can be added. Also, more definitions can be assigned values so that they can be called directly from program code. Your comments are welcome on how to further improve the HAC Glossary for programmers.

What's New:

Use the <u>Search button</u> to find out what items have been added or changed in this version of the glossary.

See illustration.

For example...

Step 1: Enter a year, such as 1994.

Step 2: Select a month from the first list.

Step 3: Select a new or changed item from the second list.

Some acronyms and abbreviations, such as the one selected, are only spelled out in the search list. They are not defined.

Some acronyms and abbreviations, such as the one selected, are only spelled out in the search list. They are not defined.

2.88M Floppy

A theoretical disk that can be used by DOS versions 5.0 and higher, however, it has never received popular use.

The structure for a 2.88M floppy is this:

3.5-inch disk Two sides 36 Sectors 80 Tracks

The difference between a 1.44M disk and a 2.88M disk is that the number of sectors is doubled from 18 to 36.

The math is easy:

Incidentally, remember how many thousands of times you have read that a K is 1,024 and not 1,000? Did you know that an M is 1,024K and not 1,000K?

Check this out:

2,949,120 bytes is (divided by 1,024) 2,880K.

However:

2,880K is (divided again by 1,024) 2.8125M.

So, a 2.88M floppy is really 2.8125M!

Short for 80386. The Intel CPU chip that introduced 32-bit technology to personal computers in 1985. It has 32-bit registers and a 32-bit address bus and comes in two varieties as far as data buses. The DX has a 32-bit data bus and the SX has a 16-bit data bus. See CPU.

8010 Star

A <u>workstation</u> developed at the Xerox Palo Alto Research Center in 1981 which was the precursor of the Macintosh.

Source: Wired, June, 1994.

An 8088 but with a 16-bit data bus.

The Intel CPU chip that was used on the original IBM PC. It has 16-bit registers, but is limited to an 8-bit data bus and a 20-bit address bus. <u>See CPU.</u>

The second popular Intel CPU chip to be used on personal computers. It has 16-bit registers and a 16-bit data bus, and increased the address bus from 20 to 24 bits. However, this is all behind the current 32-bit technology. <u>See CPU.</u>

An Intel DMA (Direct Memory Access) programmable controller chip.

Source: C Users Journal, November, 1993.

A:

The A disk drive. The colon (:) indicates to MS-DOS that the A represents a disk drive.

A>

The default DOS prompt for when A: is the default disk drive. This is an older style of DOS prompt which is seldom used. DOS now customizes the DOS prompt for you so that the default directory is also shown, as well as the default disk drive.

A:\>

A:\> is the standard DOS prompt for when A: is the default disk drive.

ACCESS.Bus

A proposed method of connecting numerous peripheral devices into a single serial port.

Source: Windows Sources, April, 1994.

Address Bus

The lines from a <u>CPU</u> to memory which indicate the addresses of the data which is being used. Each line carrys a <u>bit</u>, so the larger the bus, measured in bits (lines) the more memory which can be addressed (accessed). As an illustration, suppose that there are two lines...

11 = 3

Counting address 0, four addresses can be accessed. By adding one line, the amount of address which can be accessed is doubled...

000 = 0

001 = 1

010 = 2

011 = 3

100 = 4

101 = 5

110 = 6

111 = 7

The smallest actual address size which has become popular is the 20-bit size of the original IBM PC. A 20-bit address bus can access 1,048,576 bytes, which happens to be one megabyte. (It is slightly more than one million because of the way bits keep track of numbers.)

Two other address bus sizes are also popular: 24 bits, and 32 bits. Here is how they compare...

20-bit address bus 1 megabyte 24-bit address bus 16 megabytes 32-bit address bus 4,096 megabytes

Now, here are the address bus sizes of some popular CPU's...

8088 20 bits 8086 20 bits 80286 24 bits 80386 32 bits

The 20-bit address bus of the 8088 chip is the cause of the famous $640\underline{K}$ <u>DOS</u> memory limit. Although, 1 megabyte was addressable, 384K was used by the system, leaving only 640K for programs.

Artificial Intelligence.

Artificial Intelligence is just that--artificial.

Computers cannot think. This idea has caused many casual users to fear them. They give computers human attributes and are afraid to damage the computer's "brain."

This is all hogwash.

Computers are no more intelligent than a '57 Chevy rusting in a salvage yard.

Computers do everything in bits and bytes. Everything. Humans have become very sophisticated in manipulating bits and bytes to represent numbers, the alphabet, programs, and, even, symbolic thought. However, it is the humans who are doing this sophisticated thinking--not the computers.

Artificial intelligence can be boiled down to bits and bytes, just like everything else a computer does.

Do not let it scare you.

ALT

Abbreviation for ALTernate. There are two keys on most keyboards. You can use either one.

Analog

Not <u>digital.</u> Something, such as an electric field, which has an infinite range of potential values, as opposed to being simply on or off.

ANSI

Stands for American National Standards Institute, and is a system of character codes to control screen output.

API:

Stands for *application programming interface*. This is a collection of <u>subroutines</u> which is supplied with <u>Windows</u> and is available to programmers.

For example, *CreateWindow* is an API subroutine which programmers can use to have Windows create a <u>window</u> for them. The programmer must provide <u>parameters</u> with the CreateWindow call so that Windows knows what kind of window to create.

Writing Windows programs is largely a matter of knowing how to use the appropriate API.

Application

Application programs are programs such as spreadsheets, database managers, and word processors. They have particular applications.

Contrast them with operating systems and programming languages.

Also, a program which runs in <u>Windows</u>. In <u>DOS</u>, the programmer writes most of the program code and the result is called a *program*. In Windows, much of the program code is already supplied as subroutines which can be used by a programmer. Therefore, the programming result is often called an application of windows, or, simply, *application* instead of being called a program.

Arrow Mouse Cursor

ASCII

Stands for *American Standard Code for Information Interchange*. It is pronounced *ass'-key*. It is the standard <u>DOS</u> character set. The primary characteristic of ASCII is that it is primarily just text characters. For this reason it can usually be displayed on a screen without any funny looking characters and can be printed on virtually all printers.

Disadvantages of ASCII are that foreign characters are not included and special codes for bold text and other types of formatting are not available.

In reference to files, an ASCII file is one that is virtually all text. The opposite type of file is a <u>binary</u> one, which see.

The original IBM PC character set used ASCII characters. (However, IBM mainframes did not.)

The first 32 ASCII characters are for control codes and are not normally displayed. Note that many of these codes are outdated and were intended for teletype machines. Here they are...

<u>Byte</u>	<u>Numb</u>	<u>Function</u>
	<u>er</u>	
00000000	00	Null
0000001	01	Start Of Header
00000010	02	Start Of Text
00000011	03	End Of Text
00000100	04	End Of Transmission
00000101	05	Enquiry
00000110	06	Acknowledgement
00000111	07	Bell
00001000	08	Backspace
00001001	09	Tab
00001010	10	Line Feed
00001011	11	Vertical Tab
00001100	12	Form Feed
00001101	13	Carriage Return
00001110	14	Shift Out
00001111	15	Shift In
00010000	16	Data Line Escape
00010001	17	Device Control X-On
00010010	18	Device Control Tape-On
00010011	19	Device Control X-Off
00010100	20	Device Control Tape-Off
00010101	21	Negative Acknowledgement
00010110	22	Synchronous Idle
00010111	23	End Of Transmission Block
00011000	24	Cancel
00011001	25	End Of Medium

Substitute
Escape
Field Separator
Group Separator
Record Separator
Unit Separator

Bytes 32 through 127 are the lower ASCII characters. They include the alphabet, numbers, and punctuation marks. They are called *lower* because 32-127 are lower numbers than 128-256, which represent the higher ASCII characters. Here are the lower ASCII characters:

Numb

Character

	<u>Numb</u>	Character
<u>Byte</u>	<u>er</u>	
00100000	032	(Spacebar)
00100001	033	!
00100010	034	"
00100011	035	#
00100100	036	\$
00100101	037	%
00100110	038	&
00100111	039	•
00101000	040	(
00101001	041)
00101010	042	*
00101011	043	+
00101100	044	,
00101101	045	-
00101110	046	
00101111	047	/
00110000	048	0
00110001	049	1
00110010	050	2
00110011	051	3
00110100	052	4
00110101	053	5
00110110	054	6
00110111	055	7
00111000	056	8
00111001	057	9
00111010	058	:
00111011	059	;
00111100	060	<
00111101	061	=
00111110	062	>
00111111	063	?
01000000	064	@
01000001	065	A
01000010	066	В
01000011	067	С
01000100	068	D
01000101	069	E F
01000110	070	-
01000111	071	G
01001000	072	H
01001001	073	I

01001010	074	1
	074	J
01001011	075	K
01001100	076	L
01001101	077	M
01001110	078	N.
01001111	079	0
01010000	080	Р
01010001	081	Q
01010010	082	R
01010011	083	S
01010100	084	T
01010101	085	U
01010110	086	V
01010111	087	W
01011000	088	X
01011001	089	Ŷ
01011010	090	Z
01011011	091	[
01011100	092	/
01011101	093	1
01011110	094]
01011111	095	
		,
01100000	096	
01100001	097	а
01100010	098	b
01100011	099	С
01100100	100	d
01100101	101	e
		f
01100110	102	
01100111	103	g
01101000	104	h
01101001	105	i
01101010	106	j
01101011	107	, k
01101100	108	Ï
01101101		•
	109	m
01101110	110	n
01101111	111	0
01110000	112	р
01110001	113	q
01110010	114	r
01110010	115	
		S
01110100	116	t
01110101	117	u
01110110	118	V
01110111	119	W
01111000	120	X
01111001	121	
		y
01111010	122	Z
01111011	123	{
01111100	124	
01111101	125	{ }
01111110	126	~
01111111	127	(backspace)
J.111111	161	(Dackspace)

The high ASCII characters are not the same for various computers,

components, and programs. A listing follows, but it may vary depending upon the characteristics of your particular system.

Characteristics	Numb	<u>Character</u>
Byte	er	<u>Olialactel</u>
10000000	<u>31</u> 128	€
10000001	129	
10000010	130	_
10000010	131	, f
10000011	132	_
10000100	133	"
10000101	134	†
10000110	135	† ‡
10000111	136	+
10001000	137	‰
10001001	138	Š
10001010	139	∀
10001011	140	Œ
10001100	141	
10001101	142	Ž
10001110	143	
10001111	143	П
10010000	145	
10010001	146	,
10010010	147	"
10010011	148	"
10010100	149	•
10010101	150	_
10010111	151	_
10010111	152	~
10011001	153	TM
10011010	154	š
10011011	155	>
10011100	156	œ
10011101	157	
10011110	158	ž Ÿ
10011111	159	Ϋ
10100000	160	
10100001	161	i
10100010	162	¢
10100011	163	£
10100100	164	n
10100101	165	¥
10100110	166	1
10100111	167	§
10101000	168	
10101001	169	©
10101010	170	а
10101011	171	«
10101100	172	7
10101101	173	
10101110	174	® _
10101111	175 176	0
10110000	176 177	
10110001 10110010	177 178	± 2
10110010	110	

10110011	179	3
10110100	180	,
10110101	181	μ
10110110	182	Í
		II
10110111	183	•
10111000	184	<u>د</u> 1
10111001	185	1
10111010	186	0
10111011	187	»
10111100	188	1/4
10111101	189	1/2
10111110	190	3/4
10111111	191	ું
11000000	192	0
11000001	193	Á
11000010	194	Â
11000011	195	Ã
		Ä
11000100	196	
11000101	197	Å
11000110	198	Æ
11000111	199	Ç
11001000	200	É
11001001	201	É
11001001	202	<u> </u>
		Ç É É É
11001011	203	⊏ }
11001100	204	j
11001101	205	ĺ
11001110	206	Î
11001111	207	Ϊ
11010000	208	Ð
11010001	209	Ñ
		À
11010010	210	Ó
11010011	211	Ò Ó Ô Ö × Ø
11010100	212	Q
11010101	213	0
11010110	214	Ö
11010111	215	×
11011000	216	Ø
11011001	217	ĩi
11011010	218	Ù Ú Û Ý
		Ú Ĥ
11011011	219	Ŭ
11011100	220	Ų
11011101	221	
11011110	222	Þ
11011111	223	ß
11100000	224	à
11100001	225	á
		â
11100010	226	
11100011	227	ã
11100100	228	ä
11100101	229	å
11100110	230	æ
11100111	231	Ç
11101000	232	è
11101000	233	é
11101010	234	ê

11101011	235	ë
11101100	236	ì
11101101	237	ĺ
11101110	238	î
11101111	239	Ϊ
11110000	240	ð
11110001	241	ñ
11110010	242	Ò
11110011	243	Ó
11110100	244	ô
11110101	245	õ
11110110	246	Ö
11110111	247	÷
11111000	248	Ø
11111001	249	ù
11111010	250	ú
11111011	251	û
11111100	252	ü
11111101	253	ý
11111110	254	þ
11111111	255	ÿ

If there are 256 characters, why did the counting stop at 255? Because it started at 0.

ASP

Stands for Association of Shareware Professionals. An organization of authors, vendors, and others who want to promote shareware.

The ASP ombudsman statement:

This program is produced by a member of the Association of Shareware Professionals (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a shareware- related problem with an ASP member by contacting the member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 545 Grover Road, Muskegon, MI 49442 USA, or send a Compuserve message via Compuserve Mail to ASP Ombudsman 70007,3536.

Asynchronous

Data transfer methods sometimes depend upon internal timing sequences used by a particular type of computer. Asynchronous data transfer is a method of connecting two of more computers that does not depend upon the timing sequences of the computers.

AUTOEXEC.BAT

The **AUTO**matically **EXEC**uted **BAT**ch file. It is located in the root directory and is automatically executed everytime the computer is turned on.

B:

Stands for the B disk drive. The colon (:) indicates to MS-DOS that the ${\it B}$ represents a disk drive.

Back Button

A button towards the top of the <u>help window</u>. By <u>pointing and clicking</u> at it, you go back to the page you were just at. Like a string leading out of a maze, it allows you to retrace your steps.

A sample one is circled (with an arrow pointing to it) in the illustration.

Backslash

The backslash is the \ character. The backslash in MS-DOS stands for the root directory.

The backslash also separates directories. For example, in . . .

D:\PATH\

... the first backslash indicates the root. The second backslash indicates that *PATH* is a directory and the next item will be another directory or a filename.

Probably the most common mistake made in entering MS-DOS commands is confusing the slash (/) with the backslash (\). The slash leans forwards; the backslash leans backwards. The slash is used with switches; the backslash is used to represent the root.

Bar

A rectangular area of the screen used for a particular purpose. An example is the $\underline{\text{title bar}}$.

Bar (Scroll Bar)

The bar of a <u>scroll bar</u> along which the <u>thumb button</u> moves. The location of the thumb button on the bar indicates which part of the contents of a <u>window</u> is being displayed. The thumb button can be <u>dragged</u> along the bar with the <u>mouse cursor</u> in order to <u>scroll</u> the contents of the window. Dragging the thumb button up, for example, moves towards the top of the text.

See <u>illustration</u>.

Barlow, John Perry

One of the founders of EFF.

BASIC

Beginners All-purpose Symbolic Instruction Code. It is a programming language.

It is called *symbolic* because it allows programmers to use symbols to represent numbers and information. In algebra, these symbols are called variables.

For example . . .

X = 3

In BASIC, X is called a symbol. In algebra, X is called a variable. It means the same thing.

BASIC is the most distributed programming language there is because IBM included it along with all of the personal computers sold. Now, Microsoft distributes a version of it will every copy of MS-DOS.

BASIC is also called BASICA (for *BASIC Advanced*) and GW-BASIC (for *Gee Whiz BASIC*), as well as many other names of variations.

Note: BASIC and BASICA are on IBM brand computers. GW-BASIC is on other brands of computers.

The version of BASIC currently being distributed with MS-DOS is called QBasic, for *Quick BASIC*. Other brand names of BASIC are also on the market.

Many professional personal computer programmers do not use BASIC. Common programming languages used by the pros are assembly, C, and Pascal.

Do not confuse BASIC with the BIOS (Basic Input/Output System). They are two different things.

Batch File

A computer file which runs batches of MS-DOS commands. A batch file must have the extension BAT. Batch files are technically not programs, but they act like programs in that they have keywords and can be run like programs. Batch files have some of their own special commands.

Baud

Short for Jean-Maurice-Emile Baudot (1845-1903), French, and refers to signal changes per second in reference to <u>modem</u> data transfer rates. Depending on the technology used for a particular modem, may or may not be the same as bits per second (bps) for that modem. Baudot invented in 1894 multiplexing of telegraph transmissions. *Multiplex* means to send more than one message at a time.

BBS

BBS stands for computer Bulletin Board Service. It is a computer which is hooked to a telephone line and can be phoned by other computers. BBS's are good for electronic mail communication and for distributing programs, as well as other things. The name comes from the bulletin boards in the student centers of colleges, where anyone can post a message and everybody else can read it.

Bidirectional

Something, such as a telephone line, which communicates in both directions at once.

Binary

A type of file which contains information besides text. Examples are program, database, spreadsheet, and graphics files. The opposite of a binary file is an <u>ASCII</u> file, which see.

The binary numerical system uses only two numbers, 0 and 1, and is the actual numerical system that digital computers must use internally. See <u>bit</u> for an example of counting in binary.

Binop

Binary Operator. An equation with three variables, any two of which can be used to determine the third. For example, x+y=z.

Source: Dr. Dobb's Journal, June, 1994.

BIOS

Basic Input/Output System. This is software which runs the components of a particular brand of computer.

For example, a programmer instructs MS-DOS to display a character on the video screen. But, the programmer does not know exactly how MS-DOS does it. MS-DOS, in turn, instructs the BIOS to display the character on the screen. However, the MS-DOS programmer does not know exactly how the BIOS does it.

The BIOS is software written for a particular brand of computer. When MS-DOS calls on it to display a character on the screen, the BIOS is what actually does the work.

The reason that so many different brands of computers can all run the same software is because of this division of labor. The BIOS does the nitty gritty work for a particular computer. MS-DOS works with different kinds of BIOS. Therefore, a program that runs on MS-DOS will work on any computer that has a BIOS which MS-DOS can work with.

BIOS Interrupts

An *interrupt* is a subroutine which can be used by any program. A *BIOS interrupt* is a subroutine which is a part of the BIOS (Basic Input/Output System).

Bit

Stands for *Blnary digiT*. It is a single switch that can be on or off. It is the most basic unit that makes up all digital computers. A computer has millions or billions of them.

A bit is commonly represented as a 0 (for *off*) or 1 (for *on*). Groups of bits represent characters, numbers, pixels, programs, literally **everything** that a computer does.

Eight bits is a <u>byte</u>. The following series of bytes counts from 0 to 9 in binary...

00001000 = 800001001 = 9

The eight bits in a byte can be on and off in 256 variations and can count from 0 to 255. They can also be used to represent characters, like this...

01100001 = a 01100010 = b 01100011 = c

combinations of bytes can be used to represent programs. For example...

11111110 11000010

...means to add one to a certain number.

How does a computer know if bits are numbers, characters, programs, or something else?

The answer is that when a computer is turned on, it looks at a group of bytes in a certain location as program code to be executed. Programmers take over from there and, with program code, tell the computer which bytes should be treated as what.

Bit Net

The Internet.

Source: Computer underground Digest, May 1, 1994.

Boot

To turn the computer on.

It is called this because MS-DOS goes through a series of routines to get the computer running. These routines are tied together and the process is thus something like lacing up a boot.

Box

A small square area of the screen used for a particular purpose. An examples of a box is the <u>control box</u>. When a box is selected, it does **not** give the illusion of being pushed down.

bps

Bits per second.

Brand, Stewart

One of the original <u>Merry Pranksters.</u> Editor of the *Whole Earth Catalog*. Co-founded the Well, a popular <u>BBS</u> in San Francisco. Now, with the <u>EFF.</u>

Source: Wired, June, 1994.

Bug

An error.

The word "bug" was used this way before the computer age. However, U.S. Naval Reserve Rear Admiral (Retired) Grace Murray Hopper made the word famous when an actual bug caused a short in an early mainframe computer, the Mark II at Harvard. She taped the bug to her logbook for September 9, 1945, with an explanation of what happened.

Usually, the word is used now in reference to programs which do not work correctly. Programmers often refer to *bugs* as *features*.

Bus:

Lines that allow a <u>CPU</u> to communicate with other components. See <u>data</u> <u>bus</u> and <u>address bus</u>.

Some access rates are...

1.5MB/s to 5MB/s (megabytes per second) for an ISA (Industry Standard Architecture) bus.

32MB/s for an EISA (Extended ISA) bus.

132MB/s to 133MB/s for a VESA (Video Electronics Standards Association) bus.

Button

A rectangular area on the screen which appears to be a button and which, when <u>selected</u>, does something. Buttons often change appearance when selected so that they look like they are being pushed down. They are sometimes on a <u>button</u> <u>bar</u>.

Can also refer to a mouse button.

Button Bar

A <u>bar</u> used to display <u>buttons.</u> It often appears horizontally directly below an <u>overhead menu</u>, but can be vertical and appear anywhere.

Byte

A group of eight <u>bits</u>. Pronounced *bite*. Spelled funny to help distinguish it from the word *bit*. The word *bit* is smaller than the word *byte* and a bit is smaller than a byte.

A byte is often represented by 1's and 0'x and looks like this: 01001101. (However, bytes are often also represented by decimal numbers, and in other ways.)

The bits in a byte can be arranged 256 different ways. Bytes can represent numbers, the alphabet, programming code, and anything else that a programmer wants them to represent.

How does the computer know if a byte is a character or something else? The computer does not know anything. What a byte represents is determined by programmers.

What if a program needs more than 256 variations of something? More than one byte is used.

The original IBM PC character set had 256 characters consistent with the 256 different ways that bits could be set in a byte. See <u>ASCII</u>.

Byte-Bonding

For two computer enthusiasts to psychologically bond while discussing computers.

Source: Wired, June, 1994

One of the most popular programming languages for personal computers. Used especially by professional programmers. Designed by Dennis Ritchie. Derived from a language called ${\it B}$.

C:

The C disk drive. The colon (:) indicates to MS-DOS that the C represents a disk drive.

C+@

An <u>OO</u> programming language similar to <u>C++</u> that includes a library of objects. It is pronounced *Cat*. Notably, the @ method is used for point objects. (The @ method is derived from Smalltalk, another OO language.)

A common object for any OO language is a point object that consists of X and Y variables to specify a point. The @ method is used to specify these variables like this...

MyPoint = 10 @ 35;

...which means MyPoint is a point at the location X=10 and Y=35.

Source: Dr. Dobbs's Journal, October, 1993, Page 24.

A popular \underline{OO} programming language derived from \underline{C} . Object oriented programming is in the eyes of the programmer. It is not obvious to the user if a program is written in C or C++.

In C, variables and subroutines are organized separately. In C++, variables and subroutines can be organized together. This grouping is called an *object*.

A disadvantage of C++ is that it is initially difficult to conceptualize and involves the writing of more code. An advantage is that, in the long run, the code may be more organized.

The default DOS prompt for when C: is the default disk drive. This is an older style of DOS prompt which is seldom used. DOS now customizes the DOS prompt for you so that the default directory is also shown, as well as the defaul disk drive.

C:\>

C:\> is the standard DOS prompt for when C: is the default disk drive.

Cache

A place where data is temporarily stored. The problem is that a <u>CPU</u> can process information faster than other parts of a computer. A cache often paces the flow of information.

In printers, the data can be sent quickly to a cache where it is held and gradually fed out at the speed the printer can receive it. In this respect, it is simply a different word for *spooler*.

In disk drives, often-accessed data is kept in a cache which handles it more quickly than a disk drive.

In CPU's the next code instructions or data or kept ready in a cache, which can be accessed more quickly than Random Access Memory (RAM).

Captain Crunch

The nickname of John Draper after he used a whistle in Captain Crunch cereal boxes to access long distance phone lines in 1971.

Source: Scientific American, March 1994.

Caption

Another name for the $\underline{\text{title}}$ of a $\underline{\text{window}}$. Generally speaking, programmers call it a *caption* while users call it a *title*.

Caption Bar

Another name for the <u>title bar</u>. Programming manuals use the term *caption bar* while user manuals use the term title bar.

CCRMA (Center for Computer Research in Music and Acoustics)

At Stanford University, pronounced "Karma."

- 1) Compact Disk.
- 2) Change Directory. A $\underline{\text{Unix}}$, $\underline{\text{DOS}}$, and $\underline{\text{FTP}}$ command which changes a directory. The Unix and FTP commands are in lowercase (cd).

CD-ROM Disk Speeds

The base speed is 154 kilobytes per second.

Double-speed is 300K/s, tri-speed is 450K/s and quad-speed is 600K/s.

The higher speeds allow smoother video animation.

Central Processing Unit

A chip which does the actual computing. <u>See CPU.</u>

CERT (Computer Emergency Response Team)

An Internet security team at Carnegie Mellon University.

Source: Scientific American, March, 1994.

Chicago

The code name for a particular version of $\underline{\text{Windows.}}$ possibly to be officially named Version 4.0.

Chip

"Chip" is the commonly used word for what is actually an Integrated Circuit (IC).

A "circuit" is an electrical configuration which can be used to accomplish goals. For example, circuits of wiring make the lights in your house work. Circuits of electricity are also what make computers work, although computer circuits are extremely tiny. (Circuits of electricity keep track of whether 86bits are on or off.)

An "integrated circuit" is a collection of circuits which are grouped together. The computer revolution was sparked by integrated circuits which could be miniaturized onto small pieces of silicon.

These integrated circuits start with chunks of silicon. A chip of silicon is sliced off of the chunk. Then the chip of silicon is used to make the integrated circuit. The resulting integrated circuits are thus called "chips."

Chip Wars

(Note: See <u>CPU</u> for background information.)

Intel changed its naming pattern when it called its latest chip the *Pentium* instead of the 80586. Other manufacturers are now directly challenging Intel with their own chips, not copying the Pentium, but trying to surpass it.

It may be difficult to keep the names and specifications straight, so the HAC Glossary is starting a table to sort things out. This table will be incomplete, at first, but will improve as more information is gathered. For comparison, it starts with the early chips.

	<u>Chip</u>	<u>Nicknames</u>	<u>Date</u>	<u>Type</u>
<u>Maker</u>				
Intel	8088	8088, PC, XT	1978	CISC
Intel	8086	8086	1979	CISC
Intel	80286	286, AT	1982	CISC
Intel	80386DX	386	1985	CISC
Intel	80386SX	386	1988	CISC
Intel	80486DX	486	1989	CISC
AMD	Am486DX-40			CISC
Intel	80486SX	486	1991	CISC
Intel	80486DX2	DX2	1992	CISC
AMD	Am486DX2-		1993	CISC
	66			
Cyrix	Cx486S40			CISC
- ,	Chip	<u>Nicknames</u>	<u>Date</u>	Type
<u>Maker</u>	- _			
Intel	Pentium	Pentium	1993	CISC
Intel	DX2 Pentium		1994	CISC
Intel	DX4 Pentium	Clock Tripled	1994	CISC
Intel	P54C	P54C	1994	CISC
	Pentium			
NexGen	Nx586	Nx586		CISC
Intel	P6 Pentium	P6	1995	CISC
	Chip	Nicknames	Date	Type
Maker				
Cyrix	Cyrix M1	M1		CISC
DEC	DECchip	AXP Alpha	1992	RISC
	21064			
DEC	DECchip	21064A		RISC
	21064A			
DEC	DECchip	21066	1993	RISC
	21066			
Hewlitt-	PA-RISC	PA-RISC		RISC
Packard	7100	7100		
IBM	486SLC3	Blue	1993	CISC
		Lightening		
IBM	Power2	Power2	1993	RISC
MIPS	MIPS R4200	R4200	1993	RISC
MIPS	MIPS R4400	R4400	1993	RISC
Motorola	PowerPC 601	PPC601	1993	RISC

R

Motorola	PowerPC 603	PPC603	1994	RISC
Motorola	PowerPC 604	PPC604	1995	RISC
Motorola	PowerPC 620	PPC620	1995	RISC
Sun	MicroSparc II	MicroSparc II	1993	RISC
Sun	SuperSparc+	SuperSparc+		RISC
Sun	UltraSparc	UltraSparc		RISC
	•			

Circuit Board

A circuit board is a plastic board with an electronic circuit built into it. Circuit boards are various sizes. A typical size is slightly larger than a standard business envelope. Usually, circuit boards have several chips on them which are connected by lines which conduct electricity. The lines sometimes look somewhat like railroad tracks.

Many computers have a circuit board which is called a motherboard that lies flat across the bottom of the computer. The motherboard contains the CPU and other chips. Other circuit boards, sometimes called daughterboards, are vertical and slide into slots in the motherboard. These daughterboards have special functions, such as running disk drives or a video display monitor.

Daughterboards are also called cards.

Client Area

The central part of a $\underline{\text{window}}$ intended to be utilized as the workspace by the user or the programmer.

Clipper Chip

Key

A method promoted by the National Security Agency (NSA) which offers powerful encryption, but the data can be decoded by the US Government. Not to be confused with the Clipper programming language. The government is pushing to have the Clipper Chip installed on virtually all communication devices, such as telephones and computers, to make it easier to wire tap these devices.

When you are ready, select <u>Clipper Chip Graphic</u> to see a general idea of how the government's Clipper Chip is intended to be used. The terms used in the graphic are as follows...

Chip identification number. Each Clipper Chip has

Chip ID its own ID which can be used to determine its

particular Chip Key (CK).

The key which the government can use to indirectly Chip Key unencrypt the message. The User Key (UK) is encrypted with the Chip Key (CK) and sent along

encrypted with the Chip Key (CK) and sent along with the message. The government can use the Chip Key (CK) to unencrypt the User Key (UK) which can then be used to unencrypt the message. The Chip Key is the one which the government keeps in two separate parts, by two separate agencies. A key held by the government which is used to

Family Key determine which Chip Key (CK) to use. The Family (FK) Key works on a large number of Clipper Chips. It

unlocks the Chip ID. The Chip ID is then used by the government to obtain the two parts of the Chip Key (CK). The two parts of the Chip Key (CK) are combined in order to proceed. See Chip Key (CK),

above, to see what happens next.

In encryption, a key is not a physical thing like a door key. It is a series of bytes, such as a number, or

phrase.

The key to encrypt the message that the user has.

User Key The receiver also has to have this key in order to

(UK) unencrypt the message.

Cloaking

To hide a program by loading it into high memory.

Source: PC Magazine, May 17, 1994.

Clock Speed

How fast a <u>CPU</u> runs.

The orginal personal computer ran at 4.77MHz (megahertz). A fast one now runs at 99MHz.

Code

The word "code" can mean ...

Switches
The ASCII code
Computer instructions
PROMPT command \$ codes

Colon

The colon (:) indicates to MS-DOS that a letter refers to a disk drive. For example, A: means the A disk drive.

COM

Stands for *COMmunications port*. A <u>serial</u> port often used for <u>modems</u> and mice. A personal computer typically has up to four COM ports designated COM1, COM2, COM3, and COM4.

Command

A written instruction given to a computer at the <u>DOS prompt</u> or at the <u>File/Run...</u> menu item in the <u>Program Manager</u>. A typical command is a <u>keyword</u> to start a program. Another common type is a <u>DOS command</u>.

Command

A line on the video screen, such as at the $\underline{\text{DOS Prompt.}}$ on which a $\underline{\text{command}}$ is entered.

Compact Disk

A compact disk (CD) is a plastic disk which contains microscopic pits. A laser can read the pits and transform them into bits and bytes.

Compact disks have two common uses:

- 1) In stereo systems, a compact disk can store music.
- 2) In computers, a compact disk can store bits and bytes (and thus numbers and other information).

The same type of technology is used in both cases.

Compatible

Originally, a computer that ran the same software as an IBM Personal Computer. However, the unifying force of compatibles was not imitation of IBM, but the use of an Intel chip and MS-DOS. Since then, other manufacturers have imitated both Intel chips and MS-DOS, so the concept keeps getting fuzzier.

The single most unifying force at this time is that a compatible must be able to run programs written for MS-DOS.

Component Software

A goal of future versions of Windows is to emphasize objects over programs. An object can be, for example, a document with spreadsheets and graphics. Instead of loading a program to work on the document, you load the document. Then, *component software* is used to do the work processing, calculating, and drawing. This is just a way of saying that the programs used to work on the document are moved off center stage and are merely components of the work being done. The programming method of accomplishing this is called <u>OLE</u>.

CONFIG.SYS

A file which can be used to customize the operation of a computer. CONFIG.SYS stands for CONFIGure SYStem.

Console

The display screen and keyboard. This is a leftover from the days when teletypes were used. On modern personal computers, the keyboard is the input console and the video screen is the output console.

Control Box

A small box in the upper left-hand corner of many <u>windows</u>. It has a hyphen (-) in it. A programmer determines if the control box appears with a window or not. The control box can be used to resize and close a window and to switch to other running <u>applications</u>. <u>Pointing and clicking</u> on the control box causes a <u>control menu</u> to appear. <u>Double-clicking</u> the control box causes the window to close.

It is called a *box* instead of a *button* because it does **not** give the graphical illusion of being depressed when it is selected.

Control Menu

A menu which appears when the <u>control box</u> is selected. This menu can be used to move, resize, and close windows and to switch to other running <u>applications</u>. Programmers have some influence over what appears in control menus so they are not all necessarily the same.

Most of the functions of the menu items can be accomplished easier by other means, which are explained somewhat in "The Visible Window". The control menu is a redundant way of doing the same things, perhaps if you forget the easier ways or if your mouse stops working.

You can access the control menu without a mouse by pressing F10, using the arrow keys until the control box is highlighted, and then by pressing F10, using the

Copland

Code name for a future version of the Apple System 7 Pro operating system.

Source: Byte, May, 1994.

Copy Protection

Various methods which some programmers use to make it difficult to copy their programs. The objective behind copy protection is to stop people from copying programs without paying for them.

Corner Border

The corner of a <u>thick border</u> in a <u>window</u>. It can be used to resize a window in two directions at once. It is difficult to do, but once you position the <u>mouse cursor</u> on a border corner, the cursor changes into a double arrow. Then, you can <u>drag the mouse</u> to resize the window. Compare with <u>horizontal border</u>, <u>vertical border</u>, and <u>thin border</u>.

CP/M

Control Program for Microcomputers. It was the most popular operating system until the IBM Personal Computer and MS-DOS came along in 1981. CP/M was marketed by Digital Research, which also had an MS-DOS clone called DR-DOS. This was purchased by Novell which calls it Novell DOS.

cps

Characters per second. *Character* and *byte* are often used synonymously, so *characters per second* and *bytes per second* usually mean the same thing.

CPU

CPU stands for *Central Processing Unit*. A chip which does the actual computing. Other chips assist the CPU.

Most personal computers contain one of a series of Intel CPU chips. These chips vary in terms of speed and complexity, but their distinguishing characteristics, up to a point, have to do with how many <u>bits</u> they can handle at once.

The amount of bits they can handle depends upon the sizes of the <u>registers</u>, the <u>data bus</u>, and the <u>address bus</u>.

The original IBM PC had an 8088 chip. The 8088 was released in 1977, even though IBM did not use it until 1981. It had 16-bit registers, but only an 8-bit data bus. It had a 20-bit address bus which was the cause of the famous 640K <u>DOS</u> size limit.

Next in the PC line was the 80286 chip, also called the 286, which was released in 1984. It had 16-bit registers and a 16-bit data bus and increased the address bus to 24 bits. This theoretically broke the 640K barrier, but most software did not take advantage of it.

Next was the 80386 chip, also called the *386*, released in 1985. It jumped to 32-bit registers, a 32-bit data bus, and a 32-bit address bus. The 80486, also called the *486*, keeps up this standard.

The 80386SX chip, released in 1988, and the 80486SX chip still have 32-bit registers and 32-bit address buses, but only 16-bit data buses. Since then, the designation *DX* has come to mean a 386 or 486 with a full 32-bit data bus. Summary...

386DX 32-bit data bus 386SX 16-bit data bus

Intel has so far dominated the personal computer industry with this series of chips, but that may be changing. The newest chips have names like Pentium, M1, and PowerPC. For more information, see <u>Chip Wars</u>.

CRC

Stands for *Cyclic Redundancy Check*. This is a number which is determined by scanning a file. If the file has been changed, the CRC number will be different. It is used to maintain file integrity. For example, when PKZIP compresses a file, it determines and saves the CRC for that file. When the file is uncompressed, PKUNZIP recomputes the CRC and compares it with the original. If it is different, the new file is not the same as the original. (This could be, for example, because a disk has been corrupted, or because of interference when a file is transmitted over phone lines.)

CTRL

Abbreviatfor ConTRoL. There are two keys on most keyboards. You can use either one.

Cursor

An image which can be moved around on a <u>video monitor</u> and indicates a location on the screen. It is often and underline (_) or a pipe (|) but can have other shapes. See <u>arrow mouse cursor</u> and <u>hand mouse cursor</u>.

Cyberspace

The virtual reality inside computers. In science fiction, people enter this virtual reality to transverse networks. In studies of artificial intelligence, scientists and others wonder if peoples memories and thought processes can be transferred to computers. Interaction with others on networks, particularly Internet, is sometimes referred to as *cyberspace*. In general terms, anything having to do with the abstract inner workings of computers.

Cycle

One pulse of electricity flowing through a computer.

D:

Drive. When you see D: in syntax, it means to substitute the letter for an actual drive, such as A: or C:.

Data Bus

The lines which carry data to and from a <u>CPU</u>. Think of the data bus as being a superhighway with at least eight lanes. When a <u>byte</u> goes down this highway, it goes sideways, with one <u>bit</u> per lane. This means that the bytes can go down the road eight times faster, conceptually, than if the bits had to go down one lane a bit at a time.

Here are the sizes, in bits, of the data buses of some popular CPU chips...

8088	8 bits
8086	16 bits
80286	16 bits
80386DX	32 bits
80386SX	16 bits

Depending upon how you use your computer, traffic jams can be created by different sizes in your <u>registers</u> and your data buses. Here is an example...

Although an 80386SX can process 32 bits at a time with its registers, it can only move 16 bits at a time into and out of its CPU.

See also, Address Bus.

Data Transfer Rates

How fast is fast? Here are some sample rates of how fast data can travel.

Speed Device

All rates are approximate and vary under real conditions.	300 baud modem. For an 80-by-25 text video screen of 2,000 characters, this would be 54 seconds to fill one screen.		
37 <u>cps</u>	1200 havd madem		
150 cps	1200 baud modem.		
300 cps	2400 baud modem. Approximately 7 seconds to fill the example video screen. 9,600 modem.		
1,200 cps			
1,800 cps	14,400 modem. Approximately 1 second per text video screen. 16,800 modem.		
2,100 cps			
2,400 cps	19,200 modem. Also, satelite transmission. 28,800 modem.		
3,600 cps			
4,915 cps	The General Magic 38.4 Kbps MagicBeam used in the Apple Newton and the Sharp Wizard.		
7,000 cps	A 56 Kbps Digital telephone.		
8,192 cps	A basic-rate ISDN (Integrated Services Digital Network) 64 Kbps digital telephone.		
14,720 cps	The LapLink AirShare at 115 Kbps. This is so close to the Omnibook, below, that they may be the same, just rounded differently. The Howlitt Backerd OmniBook 115 3		
14,745 cps	The Hewlitt-Packard OmniBook 115.2 Kbps SIR (Serial Infrared) interface.		
19,200 cps	A 150 Kbps (standard speed) CD-ROM (compact disk read-only memory). Approximately 10 text video screens per second.		
00.440	A 230 Kbps Farallon PhoneNet		
29,440 cps	LocalTalk on normal phone cord. A 300 Kbps (double speed) CD-ROM.		
38,400 cps			
57,600 cps	A 450 Kbps (triple speed) CD-ROM.		
64,000 cps	Actual cable (TV) access (500 Kbps) to Internet in some areas. The Zenith		

HomeWorks modem for cable TV.
Approximately 32 text screens per
second.
A 512 Kbps DAT (digital audio tape).

65,536 cps

76,800 cps

Note: The T1 (Trunk 1) line has been variously reported as having speeds of 1.5, 1.54. 1.544, and 1.56 megabits per second.

A 600 Kbps (quadruple speed) CD-ROM.

A primary-rate ISDN (Integrated Services Digital Network) 1.5 Mbps. digital phone. May refer to the same thing as T1 line, below, but rounded. A QIC (quarter-inch tape).

196,608 cps

201,850 cps

202,375 cps

524,288 cps

1,310,720 cps

1,638,400 cps

2,621,440 cps

4,456,448 cps

5,898,240 cps

18,350,080 cps

20,316,160 cps

81,526,784 cps

ADSL (Asymmetrical Digital Subscriber Line) transmission over copper wire (1.54 Mbps). What one precompressed movie needs. May refer to the same thing as a T1 line, below, but rounded. A T1 (trunk) telephone line (1.544) Mbps). The slowest regional connection to Internet. Approximately 98 text screens per second. Token Ring (4 Mbps).

Ethernet at 10 Mbps. Theoretical Cable (TV) access to Internet. Tut Systems Silver Streak local network on normal phone cord. Approximately 655 text screens per second.

The 12.5 Mbps P1394 serial interface, also called the FireWire.

What HDTV (High-definition television)

needs per channel (20 Mbps).

The Betel (Broadband Exchange over Trans-European Links) network at 34 Mbps on fiber-optic.

A T3 (Trunk 3) backbone link of Internet

(45 Mbps).

A VBN (Vermittelandes Breitbandnetz) 140 Mbps fiber-optic network in

Germany. Also called BERKOM (Berlin Kommunikation).

A 155 Mbps proposal to update the NREN (National Research and Education Network). This is called an

OC-3 backbone.

The CASA 622 Mbps project on the

West Coast using SONET

322,122,547 cps

335,544,320 cps

1,342,177,280 cps

The following speeds refer to parallel buses (as opposed to serial communications). While the figures appear to be correct in relation to each other (except the last one which is extremely high), it is simply not known whether they refer to bits or bytes.

1.5 to 5 Mbps

2 to 3 Mbps

9 to 13 Mbps

32 Mbps

132 Mbps

2,288 Mbps

(Synchronous Optical Network) and involving universities, companies, and the federal government.

An OC-48 cable, which is 2.4 Gbps (Gigabits per second). Probably, this and the next entry refer to the same thing, just rounded differently by different people.

The current top speed (2.5 Gbps) of SONET (Synchronous Optical Network). The theoretical top speed (10 Gigabits per second) of SONET. Approximately 671,088 text screens per second. ISA (Industry Standard Architecture) bus.

IDE (integrated drive electronics) disk drive.
SCSI (small computer systems interface).
EISA (Extended Industry Standard Architecture) bus.
VESA (Video Electronics Standard Association) bus.
IBM Power2 bus.

Database

A collection of information in a computer. The most common type of database is a mailing list.

Daytona

Code name for a future version of Windows NT.

Source: Byte, May, 1994.

Default

What will be used if nothing else is specified. Usually in reference to disk drives and directories. Also called the *active* or *current* disk drive or directory.

Even if you are not aware of it, your computer always has a default drive and a default directory.

The most common **DOS** prompt indicates the default disk drive and directory:

D:\PATH>

The default disk drive is represented by D: and the default directory is represented by \PATH.

Dialog Box

A <u>box</u> which allows information to be exchanged between a computer and its user. For example, a dialog box may be used to find a term in this glossary. The user informs the computer what term she is looking for, and the dialog box informs the user if that term, or similar ones, is available.

Diffie, Whitfield

A leading cryptographer.

Source: Computer underground Digest, May 1, 1994.

Digerati

From *digital* and *literati*. Distinguised people in digital technology.

Source: Wired, February, 1994.

Digital

A digital computer is one which is based on binary digits--bits!

Directory

A group of files on a disk. However, the word is also used in slightly different ways . . .

- 1) A directory is a location on a disk which keeps a list of related files.
- 2) A directory is a list of files displayed on the video screen by the DIRectory command.

Every disk has at least one directory, called the *root*. Other directories, which you can make, change, and remove, grow off of this root. The root directory is represented by the backslash (\). For example . . .

DIR \

... is an MS-DOS command to display the root directory.

Disk

A disk is a piece of circular film or metal which can magnetically store computer files.

(The files are stored in bits and bytes, of course! A certain type of magnetic field means a bit is on; otherwise a bit is off.)

Computer disks are kept in square covers to protect the disks.

Disks can be floppy or hard . . .

- 1) A floppy disk is made of film. If it is taken out of its cover and waved in the air, it flops! (But, then, taking it out of its cover ruins it.) Floppy disks are also called removable disks because they can be repeatedly inserted and removed from disk drives.
- 2) A hard disk is made of metal. Hard disks are installed permanently inside a computer in a metal box. Hard disks are manufactured in a dust free environment. If they are taken out of their metal boxes, they are ruined. Hard disks are also called fixed disks because they are fixed permanently inside the computer. Hard disks can hold many times the information of floppy disks.

Floppy disks come in two popular sizes:

- 1) 5.25-inch. This was the original size disk for the IBM Personal Computer. The holder of a 5.25-inch disk is flexible, so that if you wave a 5.25-inch disk (and cover) in the air, it flops.
- 2) 3.5-inch. This smaller size holds more information than the larger size. A 3.5-inch disk is enclosed in a hard plastic cover. Even though the disk inside is flexible, the cover is not. If you wave a 3.5-inch disk (and cover) in the air, it does NOT flop. But, it is still called a floppy disk because the disk, itself, is made of film.

Note: Some people mistakenly call a 3.5-inch disk a hard disk, because of the hard plastic cover. Be careful in discussions of hard disks that all participants know whether "hard disk" means the metal fixed disk inside a computer or the floppy disk in the hard plastic cover.

Disk Drive

A disk drive is what reads and writes files to disks.

A disk drive is somewhat like a stereo turntable. A head moves over the disk and reads information from the disk or writes information to the disk.

A big difference between a stereo turntable and a disk drive is that a turntable has a needle which actually touches the record. A disk drive head uses a magnet which does not actually touch the disk.

Disk drives are in boxes which technicians can install and remove from a computer. The boxes are about the size of a paperback book.

Some disk drives are sealed in a dust-free environment. The disks used in these types of drives are called *fixed disks* or *hard disks*. The disk is permanently installed inside the box and cannot be removed.

Other disk drives have a slot in which to place disks. Disks which are used by these types of drives are called *floppy disks* or *removable disks*. The 3.5-inch disks in hard plastic covers are in this category, as well as the 5.25-inch disks in floppy covers.

The slot in the front of your computer for your A: disk drive is the front of the box which contains the disk drive.

Disk Drive Transfer Rates

IDE (integrated drive electronics) drives transfer data at a rate of two to three megabytes per second (MBps or MB/s).

Enhanced IDE, also called Fast IDE, drives boost this to 9 to 13 MB/s.

SCSI (small computer systems interface, pronounced *sexy* or *scuzzy*) drives are also in the neighborhood of 9 to 13 MB/s.

Disk Drive Access Rates

How fast, on the average, that a disk drive can find information on a disk. The lower the number the better. Generally speaking, larger hard disk drives are made with faster access rates. The following examples are from an Ambra advertisement and are used for comparison purposes, only.

1 GB	8.9 ms (milliseconds)
(gigabyte)	
540 MB	10.5 ms.
(megabyte)	
440 MB	12 ms.
340 MB	12 ms.
240 MB	15 ms.
170 MB	17 ms.

DIZ (Description in Zip)

Used as a filename extension, as in FILE_ID.DIZ, and is a file included inside a $\overline{\text{ZIP}}$ file, which describes the other files in the ZIP file.

Source: ASP (Association of Shareware Professionals).

DNLD

A directory commonly used to download files from directories. It stands for DowNLoaD. Once you make a DNLD directory, you can set your communications software to download all files from BBS's to it. Then, you know where all of your recently downloaded files are on your hard disk. The opposite of a DNLD directory is an <u>UPLD</u> directory.

One of two $\underline{\text{Unix}}$ prompts. The other is %.

In <u>DOS</u>, it indicates codes for the PROMPT command.

DOS

DOS stands for "Disk Operating System". It rhymes with boss. Every computer has essential operating system software which does fundamental tasks, such as starting the computer when it is turned on and displaying a prompt for accepting commands. DOS is one such operating system. Despite its name, it does much more than just operate the disks.

DOS Command

One of the programs or subroutines distributed with $\underline{\text{DOS}}$ that can be entered at the $\underline{\text{DOS prompt}}.$

DOS Prompt

The DOS prompt to most people is C:. It is a prompt which lets a computer user know that it is time to instruct MS-DOS to do something.

Technically, it is the MS-DOS prompt. But in actual conversation, people call it the DOS prompt. "DOS" rhymes with "boss."

The standard DOS prompt consists of a letter (from A to Z), a colon, (:), a backslash (\) and a pointer character (>). The letter indicates which disk drive is the default one. ("Default" means that it is the disk drive which will be used if another one is not specified.) The backslash (\) means the root directory. The pointer character (>) means "put your instruction here."

The DOS prompt can be customized in many different ways. So, it may not appear like C:>, at all.

You can do one of three things from the DOS prompt...

- 1) Change the default disk drive.
- 2) Enter an MS-DOS command.
- 3) Enter a keyword to start a program.

DOS Prompt Designation

The default <u>DOS prompt</u> is designated as <u>D:\PATH></u>. This is similar to the most widely used type of DOS prompt.

The first part, D:, represents the <u>default</u> disk drive. (The D stands for Disk Drive.) It could actually be A:, B:, C:, D:, or some other disk drive designation.

The second part, \, represents the root directory. When it comes immediately after D:, it means *start at the root*.

The third part, PATH means the path to the default directory. Since directories can have a wide variety of names, the actual PATH, could have thousands of possibities.

The fourth part, the >, means *put it here*.

Altogether, the D:\PATH> DOS prompt means this is the default disk and directory, enter your command here.

DOS Shell

The DOS Shell is a menu driven interface available in MS-DOS versions 4.0 and greater.

For example, from the DOS prompt, you have to type in a command; but, from the DOS Shell, you can select a command from a menu.

The DOS Shell has become obsolete as a result of the popularity of Windows.

Dot Pitch

The distance between dots on a video display screen. A *dot* is not the same as a <u>pixel</u>. A color monitor typically has a red, green, and blue dot for each pixel. The intensity of each dot determines the color for a pixel.

The smaller dot pitch, the finer the display. Example dot pitches for 17-inch monitors are .25mm (millimeter) to .28mm.

The dots are holes in a screen which is placed close to the cathode ray tube. These holes keep the colors from spilling over into unwanted areas. It keeps them focused.

Some screens do not have holes, but, rather, slots, or other configurations, although they accomplish the same task. These may be called a *slot pitch* or a *striped aperture grill*.

Double Click

To click the <u>primary mouse button</u> twice in rapid succession. It takes practice and, then, it doesn't always work right. You often must try several times. Often, double-clicking on something has a different result than just a <u>point and click</u>.

Down Arrow (Scroll Bar)

<u>Point and click</u> on the down arrow of a <u>vertical scroll bar</u> to <u>scroll</u> the contents of a <u>window</u> one line towards the bottom of the text. The text, itself, moves up.

See <u>illustration</u>.

Drag the Mouse

To move the <u>mouse cursor</u> while holding down the <u>primary mouse button</u>. Typically used to move an image on the screen from one place to another. For example, moving the <u>thumb button</u> on a <u>scroll bar</u> is a three-step dragging process:

- 1. Place the mouse cursor on the thumb button.
- 2. While holding down the primary mouse button, drag the thumb button to a new location by moving the mouse.
- 3. Let up on the primary mousing button, leaving the thumb button at the new location.

Compare with point and click.

Drive

The word *drive* is just a shortened way of saying *disk drive*.

Dumb Terminal

A computer terminal which merely accesses a computer and is not, itself, a computer. It does not have a <u>CPU</u>. Contrast with <u>smart terminal</u>.

E-Field

Electric Field. Refers to electronic radiation.

Source: PC Magazine, May 31, 1994.

EEPROM

Electrically Erasable Programmable Read-Only Memory

EFF (Electronic Frontier Foundation)

An organization promoting civil rights in <u>cyberspace</u>. It is leading the fight against the government's <u>Clipper Chip.</u>

Electronic Frontier

A reference to <u>Cyberspace</u>. Coined by <u>John Perry Barlow</u>.

EPIC (Electronic Privacy Information Center)

An organization formed on April 29, 1994 by the CPSR (Computer Professionals for Social Responsibility) and the Fund for Constitutional Government.

EPIC, 666 Pennsylvania Ave., SE, Suite 301, Washington, DC 20003. (202) 544-9240. epic@cpsr.org.

Source: Computer underground Digest, May 1, 1994.

Escape

Abbreviation for ESCape. The key.

EXAMPLE.TXT

Used frequently as an example filename.

EXT

Extension. Used in syntax to indicate a filename extension.

Extended Simple Bucky

A keystroke combination involving holding down a special key while pressing a series of other keys. For example, holding down the key while pressing the key several times.

In Windows, for example, this keystroke combination can be used to switch between running programs...

- 1. Hold down the key.
- 2. Press and let up the key. Do this two or more times. (Press and let up the
 - key to cancel.)
 - 3. Let up the key.

It's like holding down the key to type a series of capital letters, except you hold down the key, instead.

Compare with Simple Bucky.

Extension

The configuration of a filename is FILENAME.EXT. The *EXT* part, following the period, is the *extension*. It is an optional three-character ending of a filename.

A filename can have up to eight characters, an optional period, and up to three more characters. Here are some examples...

F
F.E
FI.E
FIL.EX
FILENAME
FILENAME.E
FILENAME.E
FILENAME.EXT
F.EXT

Some directory listings omit the period and line up the extensions in a column, line this...

FILE F EXT FILENAME E FILENAME EXT

The extensions are typically used to classify filenames. For example, a .TXT extension usually indicates a *TeXT* file. For more examples, do a search with a period (.) as the first character.

External

An external MS-DOS command. This is a command which remains on a disk until it is needed. Then it is loaded into memory and used.

If MS-DOS is installed on a ROM chip (instead of disks), then the external commands are readily available and appear to be internal.

FCG (Fund for Constitutional Government)

A non-profit organization to protect civil liberties and constitutional rights.

File Attributes

<u>DOS</u> keeps tract of certain attributes of files, which are abbreviated R, H, S, and A. A short description of each follows.

R stands for **read only**. When the R attribute is set, DOS prevents the file from being changed.

H stands for **hidden**. When the H attribute is set, some directory listings do not show a file.

S stands for **s**ystem. Some operating system files are marked with this attribute set.

A stands for *archive*. This attribute is used to assist in backing up files. When a file is created or updated, this attribute is set. Then, when some programs back up the file, they turn this attribute off. That way, the programs can keep track of which files need to be backed up.

File

A file is a series of related bytes.

Here is a sample byte...

00101101

A byte might represent a letter of the alphabet, a number, information (such as a person's gender), or a piece of program code. Here are lots of bytes together in sequence . . .

They might represent a sentence, a series of numbers, the gender of each person in the office, or a tiny program. A file is a collection of bytes like these which have something in common.

Files are moved all about inside a computer, from memory to the video, to the printer, to and from disks, and other places. If each byte is like a train car, then a file is somewhat like a train moving about inside the computer.

Filename

A name of eight or less characters plus an extension of three or less characters. The syntax is FILENAME.EXT. It is a name which refers to a particular computer file. An example of a filename is EXAMPLE.TXT.

In all caps, FILENAME stands for a generic filename. When you see FILENAME, it means to substitute an actual filename. FILENAME is used to indicate syntax.

FILENAME.EXT

In all caps, stands for a generic filename and its extension. When you see FILENAME.EXT in regards to syntax, it means to substitute an actual filename and an actual extension.

Flatland

Using software with <u>Ring 0</u> privileges that sees all memory as being continuous and flat (equal). Thus, in flatland.

The alternative is programs which are limited to certain segments of memory so that they do not interfere with the memory segments of other programs. All memory in this case is not equal and is not flat.

When you are ready, select <u>illustration</u>. You will see that both segmented memory and flat memory actually refer to the exact same thing. Any flatness, or lack thereof, is in the mind of the programmer. Note also, that the segments are in units of 10 to make it easier to understand the concept. In reality, segments are in other sizes.

Source: PC Magazine, May 31, 1994.

Flexibility

Why things having to do with computers are not consistent. For example, why the <u>primary mouse button</u> may be on the left or on the right. It is harder to learn, but more flexible to users in the long run. Computers are extremely flexible, but sometimes nearly impossible to describe with certainty. Also changes may be made in the future which cannot be anticipated.

Floppy

A disk which is made of film and can be inserted and removed from a disk drive. This includes 5.25- and 3.5-inch disks. A 3.5-inch disk is called a floppy even though it has a hard plastic cover.

Contrast floppy disks with hard disks. A hard disk is made of metal and is permanently installed inside a computer.

Four Horsemen

A reference to the Book of Revelations in the Bible. The Four Horsemen in computer cryptology are kidporners, dope dealers, the Mafia, and terrorists.

Source: Computer underground Digest, April 17, 1994.

FSP

File Service Protocol. An <u>Internet</u> protocol allowing the transfer of large volumes of files.

Source: Computer Underground Digest, April 10, 1994.

FTP

File transfer protocol. A particular method of accessing files which is used on the <u>Internet.</u>

Function Keys

The keys, usually along the top or left of a keyboard, which begin with an $\it F$ and are numbered from F1 to F12.

In <u>Chicago</u>, pressing F5, or F8 while the computer is starting will display information on <u>DOS</u>.

Full Duplex

Bidirectional.

Source: PC Magazine, May 31, 1994.

Geek Out

To do something on a computer during a social event.

Source: Wired, June, 1994.

Gershwin

Code name for a future version of the Apple System 7 Pro operating system.

Source: Byte, May, 1994.

Gilmore, John

Sun Microsystem's first programmer. Now a leader at the <u>EFF.</u>

Source: Wired, June, 1994.

Glass Roots Campaign

From the glass in fiber optics. To organize a political campaign over a network. Specifically, the campaign against the <u>Clipper Chip.</u>

Source: Wired, June, 1994.

Graphical Hot Spot

A graphical image which is a <u>hot spot</u>. It is not highlighted. The only way to see if a graphical image is a hot spot is to run the mouse cursor over it and see if it turns into a <u>hand</u>. Compare with <u>word hot spot</u>.

Greater Than Symbol (>)

This pointer character >, the *greater than* symbol, is used in the standard DOS prompt. It means "put your instruction here." An example of this is the C: DOS prompt.

The > character can also mean to redirect output, an advanced feature of MS-DOS.

GUI (Graphical User Interface)

A way of communicating with a computer user by way of graphics.

Guppies

Fish that eat their own young. A reference to adults who seek to prosecute young hackers.

Source: Computer underground Digest, April 10, 1994.

GZip

Abbreviated GZ. A compression program.

Source: E-mail on EFFSIG on CompuServe.

Hacker

Someone who obsessively explores the capabilities of computers. Among programmers is generally considered as a complement. However, has been used by the news media to mean people who break into computer networks.

Hand Mouse Cursor

The mouse cursor which probably (see $\underline{\text{flexibility}}$) looks like this: $\underline{\ }$. It indicates a $\underline{\text{hot spot}}$. Compare with $\underline{\text{arrow mouse cursor}}$.

Hard Disk

The phrases *hard drive* and *hard disk* mean the same thing. They mean the disk drive for a fixed disk permanently installed inside a computer.

A hard disk is made of metal and is, thus, *hard*. Removable floppy disks are made of film, and are, thus, *floppy*.

The 3.5-inch removable disks come in hard plastic cases. Some people mistakenly call these "hard disks." This is incorrect. The disk inside the hard plastic is actually made of film. Thus, 3.5-inch removable disks are correctly called "floppy disks."

Hardware

Hardware is the physical part of a computer: Like the case, the keyboard, and the video monitor. Contrast this with <u>software.</u>

Hellman, Martin

A leading cryptographer.

Source: Computer underground Digest, May 1, 1994.

Help Buttons

<u>Buttons</u> towards the top of a <u>help window</u> which allow you to do more things. They can be customized by programmers and so do not look the same in all programs. You use a help button by <u>pointing and clicking</u> at it.

Sample ones are circled (with an arrow pointing at them) in the illustration.

Help Window

A window specifically designed for help systems. <u>Windows</u> Help, and the help systems of many other Windows programs use the help window. However, it can be customized and does not always look exactly the same.

See illustration.

Hertz (Hz)

One cycle per second. Named after German physicist Heinrich Rudolph Hertz (1857-1894), who first used radio waves.

Kilohertz (kHz): 1,000 cycles per second. **Megahertz (MHz):** 1,000,000 cycles per second.

Horizontal Border

The top or bottom edges of a <u>thick border</u> in a <u>window</u>. They can be used to resize a window in up and down directions. It is difficult to do, but once you position the <u>mouse cursor</u> on the border, the cursor changes into a double arrow. Then, you can <u>drag the mouse</u> to resize the window. Compare with <u>corner border</u>, <u>vertical border</u>, and <u>thin border</u>.

Horizontal Scroll Bar

A <u>scroll bar</u> which is oriented in a horizontal position. It is used to <u>scroll</u> text left and right. If the text is not wider than the <u>window</u>, and a horizontal scroll bar is not needed, it is not shown. The <u>Windows help system</u> is designed to avoid horizontal scroll bars, so they are not as common as <u>vertical ones</u>. Look for horizontal scroll bars at the bottom of windows.

See <u>illustration</u>.

Hot Key

A key combination which takes the place of <u>pointing and clicking</u> at something.

Hot Spot

An area of the screen which causes something to happen. There are <u>graphical hot spots</u> and <u>word hot spots</u>.

Hypergraphic

A derivation of the word <u>hypertext</u>. Instead of skipping between parts of text, it involves skipping between parts of graphics. It is an extension of the concept of <u>graphical hot spots</u>.

In "For Absolute Beginners", the open book illustration actually consists of three graphics, two of them <u>hot spots</u>, which are positioned side by side so that they appear to be one.

In "The Visible Window", the primary graphic contains too many hot spots for this method to be practical. Therefore, it is one graphic which is subdivided into many hot spots.

The difference is primarily a programming one, and the results can appear to be the same to the user. However, as a general rule, hypergraphics are more complicated than mere graphical hot spots.

Hypertext

A method of using computers to jump between parts of text in the same or in different documents. The word is probably derived from the concept of hyperspace in science fiction where spaceships can jump through space.

Hypertext makes flipping through pages of a book unnecessary. An index or table of contents takes one immediately to a destination. Definitions of words are immediately available without having to flip through dictionaries.

<u>Hot spots</u> are used to indicate where the user can make a hypertext jump. A reader can select the hot spots or skip over them depending upon his or her needs, making reading much more efficient than regular books. Compare with <u>hypergraphics</u>.

In Context. In reference to a character being assumed on the <u>Internet</u>. To be IC is to be in context with that character and not to be assuming one's real identity.

Source: Computer underground Digest, April 12, 1994

Icon

A small graphic which represents something, such as a $\underline{\text{minimized}}$ $\underline{\text{window}}$. $\underline{\text{Double-clicking}}$ the icon activates or enlarges the window.

Icons can also represent and activate files and programs.

Idea Hamster

Someone who rolls an idea around over and over until she comes up with something.

Source: Wired, June, 1994.

Information Superhighway

Many people refer to the <u>Internet</u> as being the information superhighway. However, the information superhighway as proposed by the federal government in the National Information Infrastructure (NII) Agenda for Action consists of phone-computer-tv's hooked up with fiberoptic cables. The NII is a government body with staff, committees, and projects to tax for and regulate computer networks.

Input Device

A device to provide input to a computer. The most obvious input devices are a keyboard and a $\underline{\text{mouse.}}$

Instructions

The word "instructions" can have at least three different meanings.

- 1) Specifically, a computer instruction is a piece of a program which directs the computer to do something. These types of instructions are in bits and bytes.
- 2) An instruction is also something which you instruct MS-DOS to do at the DOS prompt. You can instruct the computer to (A) change the default disk drive, (B) perform a command, or (C) start a program.
 - 3) An instruction can mean just about anything you do in a program.

Internal

An internal MS-DOS command. This is a command which is loaded into the computer's memory when the computer is turned on. The command remains in memory where it is readily available.

In reference to volume labels, "internal" means a name which is stored magnetically on a disk, as opposed to being printed on a piece of paper and physically glued to the outside of a disk.

Internet

The world's largest network of computers. The current "superhighway" of information flow. It was initiated in 1973 by the US Defense Advanced Research Projects Agency (DARPA). The National Science Foundation (NSF) made a major contribution to Internet in 1986 with the NSFNET which is a major part of Internet.

Internet is not just a network, but, rather, a network of networks. It connects universities, government agencies, and commercial enterprises. The number of computers accessible through Internet is estimated to be in the tens of millions.

Sometimes, internet (lowercase) means any connection of networks.

Internet Society

An organization to promote the <u>Internet</u>. Publishes the *Internet Society News*. 12020 Sunrise Valley Drive, Suite 270, Reston, VA, 22091. 703-648-9888.

Source: Boardwatch, April/May, 1994.

Internetwork

A connection of networks. Also called an <u>internet</u> (lowercase).

Source: PC Magazine, May 31, 1994.

Interrupt

A particular subroutine which is readily available in a computer's memory and may be used by any program. These subroutines are called *interrupts* because a program is interrupted to run the subroutine.

IRC (Internet Relay Chat)

A method of communicating with other users on the <u>Internet.</u>

IRQ

Interrupt request. Also, interrupt request line. A set of lines to the CPU (central processing unit).

Note that there are software interrupts and hardware interrupts. A software interrupt is a subroutine supplied by the operating system to do routine chores. (In DOS, there are BIOS (basic input/output system) interrupts and DOS interrupts.) The concept comes from *interrupting* the CPU to do something.

The standard hardware interrupts are...

- 0 System time.
- 1 Keyboard.
- 2 Available to other interrupts.
- 3 COM2, COM4, and other.
- 4 COM1 and COM3.
- 5 LPT2.
- 6 Floppy disk.
- 7 LPT1.
- 8 Real-time clock.
- 10 Available.
- 11 Available.
- 12 Available.
- 13 Math coprocessor.
- 14 Hard disk.
- 15 Available.

Assigning new components to IRQ lines can cause conflicts and be frustrating. Microsoft's Plug and Play system will make this easier.

ITU

International Telecommunications Union. Sets standards for <u>modems.</u> Also called ITU-TSS. The TSS stands for *Telecommunications Standardization Section.*

Johnson, Mark

Alias Vito, 39, arrested in April of 1994 in Fresno, CA, for allegedly stalking and harassing people on computer networks. He was charged with 44 counts of credit-card fraud, grand theft, and distributing pornography to a minor.

Source: Orange County Register, April 16, 1994.

Stands for *Kilobyte*. Is 1,024 <u>bytes</u>. *Kilo* normally stands for a thousand. However, it is slightly different in reference to computers because of the way <u>bits</u> keep track of numbers...

```
00000000 00000000 = 0

00000000 00000001 = 1

00000000 00000010 = 2

00000000 000001000 = 4

00000000 00010000 = 16

00000000 0100000 = 32

00000000 01000000 = 64

00000000 10000000 = 128

0000001 00000000 = 528

00000100 00000000 = 1,024
```

For an example of sequential counting, see bit.

A kilobyte is also 2 to the power of 10.

K Series

A series of chips by AMD (Advanced Micro Devices) designed to compete with Intel's Pentium chip.

Source: PC Magazine, May 31, 1994.

K&R

Kernighan and Ritchie, for Brian Kernighan and Dennis Ritchie, authors of *The C Programming Language*, a standard textbook.

kbps

Either $\underline{\text{kilobytes}}$ or kilobits per second. Which one is often not specified, although it appears that in most cases it refers to **bits**.

Keyword

In the <u>Windows Help System</u>, a keyword is a word which can be used to help find a <u>topic</u>. A single topic can have many keywords. For example, the topic **Help Buttons** can have both *Help Buttons* and *Buttons* as keywords.

A keyword can also be a word that starts a program. It is derived from the filename of a program.

Using the FILENAME.EXT generic form of a filename where FILENAME is the name of the file and EXT is the EXTension, all programs must have one of three extensions . . .

FILENAME.COM FILENAME.EXE FILENAME.BAT

These three extensions are COM, EXE, and BAT. Whenever you see a file with one of these extensions, it can be run as a program by entering FILENAME. Thus, FILENAME is the keyword which starts the program.

Examples:

MOUSE.COM MOUSE is the keyword. PKUNZIP.EXE PKUNZIP is the keyword.

RUN.BAT RUN is the keyword.

(Note: Technically filenames with BAT extentions are called batch files, but the concept is the same. You enter the keyword of the batch file and it runs like a program.)

Kilobyte

See <u>K.</u>

Label

When used in MS-DOS, refers to the volume label. This can be especially confusing because the printed piece of paper glued to the outside of a disk is also called a label. Like many English words, you will have to consider the context of the way *label* is used to determine if it refers to the volume label or the printed label.

David LaMacchia

An MIT (Massachusetts Institute of Technology) student indicted by a federal grand jury of distributing non-shareware commercial programs on the <u>Internet.</u>

He allegedly used aliases of John Gaunt and GRIMJACK. The name of the BBS was allegedly CYNOSURE. (This is not the same as the Cynosure Online BBS in Eldersburg, MD.)

Language

A collection of words and symbols which stand for computer instructions.

A computer follows numerical instructions which are virtually unreadable by humans. To make programming easier, words and symbols are substituted for the numerical instructions.

Many programming languages exist with different "personalities" ...

BASIC is for beginners.

Assembly language is for hackers and pros.

FORTRAN (FORmula TRANslator) is for scientists.

COBOL (COmmon Business Oriented Language) is for business.

Pascal is for students and serious amateurs.

C is for pros.

Left Arrow (Scroll Bar)

<u>Point and click</u> on the left arrow of a <u>horizontal scroll bar</u> to <u>scroll</u> the contents of a <u>window</u> a small amount towards the left of the text. The text, itself, moves to the right.

See illustration.

Liddle, David

Worked on the $\underline{8010~Star}$, the precursor of the Macintosh, at the Xerox Palo Alto Research Center in 1981. Now, with the $\underline{\mathsf{EFF}}$.

Source: Wired, June, 1994.

List File

- (1) A file which contains a list of other files for \underline{PKZIP} or $\underline{PKUNZIP}$ to work on. One usually has an .LST extension.
- (2) PACKING.LST, a type of file distributed with many programs that lists all of the files shipped with a program.

Load

To *load* a file or a program means to read the bytes off of a disk and store them in Random Access Memory (RAM).

LPT

Line Printer.

1. In <u>DOS</u>, is used with a number, like this...

LPT1

LPT2

LPT3

LPT4

It refers to a <u>parallel port</u> which is often used by printers. Personal computers typically have either two or four parallel ports. The printer is typically, but not necessarily, connected to LPT1, or parallel port 1. Compare with <u>COM</u>.

2. In lowercase, a **Unix** command which prints a file.

LRF Support

Little Rubber Feet Support. Used as a joke: "Does this system have LRF support?"

Source: Wired, June, 1994.

MAW

Microsoft at Work. Standards which allows office machines to communicate with computers.

Maximize

To enlarge a $\underline{\text{window}}$ to the full size of the screen. This is usually done by selecting the $\underline{\text{maximize button}}$. However, it can also be done by $\underline{\text{double-clicking}}$ on the $\underline{\text{title bar}}$ and by using the $\underline{\text{control menu}}$.

Maximize Button

A button in the upper right corner of a <u>window</u> which is used to <u>maximize</u> and <u>restore</u> a window. It is optional and only present if a programmer puts it there.

A window can be in one of three states:

- 1. Maximized: The full size of the screen.
- 2. Normal: Variable, but **not** the full size.
- 3. Minimized: An icon.

When a window is normal size, the maximize button is a single arrow pointing up. When a window is already maximized, the maximize button is a double arrow pointing up and down. When it looks like a double arrow, it is also called a <u>restore button</u>, because, if selected, it restores the window to the normal size.

Mbps

Either <u>megabytes</u> or mega<u>bits</u> per second. Which one is often not specified.

MC68882

A floating-point coprocessor which upgrades the MC68020/030 and the MC68881.

Source: Dr. Dobb's Journal, June, 1994

Megabyte

1,048,576 bytes. The next step after <u>kilobyte.</u> It is not an even one million because of characteristics of <u>binary</u> arithmetic that <u>bits</u> and <u>bytes</u> use.

A megabyte is 2 to the power of 20. It is also 1 kilobyte squared (1,024 times 1,024).

Memory

Generally speaking, computer $\it memory$ refers to Random Access Memory (RAM).

Menu Bar

Another name for the <u>overhead menu</u>.

Merry Pranksters

The people in the <u>EFF.</u> It is derived from the book *The Electric Kool-Aid Acid Test* by Tom Wolfe, where it refers to a bus load of hippies.

Source: Wired, June, 1994.

MHz

Megahertz. One million cycles per second. See <u>hertz.</u>

Micron

One-millionth of a meter.

Minimize

To reduce a $\underline{\text{window}}$ to an $\underline{\text{icon}}$. This is usually done by selecting the $\underline{\text{Minimize Button}}$.

Minimize Button

A button in the upper right corner of a $\underline{\text{window}}$ which is used to reduce the window to an $\underline{\text{icon}}$. It contains an arrow pointing down.

Modal Window

One which requires immediate attention and does not allow anything else to go on until it goes away.

Modeless Window

A normal window. Contrast with modal window.

Modem

Stands for *MOdulator/DEModulator*. A device used to convert data to and from signals which can be sent across phone lines.

Mongo

Huge. Probably derived from Mongolian Hordes. Usage: ...mongo hard disk.

Source: PC Magazine, May 31, 1994.

Monitor

The television-like component of your computer that displays graphics and information. See $\underline{\text{video monitor}}.$

Motif

A <u>GUI</u> that can be run from <u>X Window.</u>

Mouse

An <u>input device</u> which is used to move a <u>cursor</u> on the <u>video monitor</u> and make <u>selections</u>. The mouse rests on a surface, such as a table, desk, or mouse pad, and is moved across it by hand. The cursor makes similar movements on the screen. A mouse typically has two or three <u>buttons</u>, which are used to select items <u>pointed to</u> on the screen. The buttons are the primary and secondary buttons. If a mouse has three buttons the middle one is called, simply, the middle button. Some items are selected by <u>double-clicking</u> a mouse button.

MS (Millisecond)

One thousandth of a second.

MS-DOS

"MS-DOS" stands for "MicroSoft Disk Operating System". It is the official name of the operating system for IBM compatible computers. It is called "Microsoft" because that is the name of the corporation which sells it.

Sometimes MS-DOS is shortened to DOS. Versions of MS-DOS which are written for IBM brand computers are sometimes called PC-DOS or IBM DOS.

MS-DOS Interrupts

An *interrupt* is a subroutine which can be used by any program. An "MS-DOS interrupt" is a subroutine which is a part of MS-DOS.

Murai, Jun

The "Internet samurai." The founder of the first public access <u>Internet</u> network (TWICS, Two Way Information Communications System) in Japan.

Source: Wired, February, 1993.

Network

A network is two or more computers which are connected.

NexGen

A company who is attempting to compete with Intel's Pentium chip with its Nx586 chip.

Source: PC Magazine, May 31, 1994.

NIM

News in Motion. A news service for $\underline{\text{Windows}}$ which is available on the $\underline{\text{Internet.}}$

Source: Online Access, May, 1994

Nx586

A new chip being developed by NexGen which is intended to compete with Intel's Pentium Chip. See <u>chip wars.</u>

Source: PC Magazine, May 31, 1994.

Object Oriented

Also, OO. A method of organizing computer tasks around *objects* rather than variables, subroutines, or programs. See <u>OO.</u>

Ohnosecond

That short period of time when you just realize that you've erased an important file.

Source: The Electronic Traveler by Elizabeth P. Crowe.

OLE

Stands for *Object Linking and Embedding*. A programming basis for providing an <u>object oriented</u> user interface for <u>Windows</u>.

Object Oriented OO OOP

OO stands for **o**bject **o**riented. Usually refers to object oriented programming (OOP). However, some applications also involve the usage of objects.

Non-OO programming separates the variables from the actions that can be performed on them. For example, one part of the program might define the variables X and Y as integers. Another part of the program might use X and Y as screen coordinates to draw a dot.

In OO programming, the variables and the actions performed on them are defined together. For example, an object may be defined as being a *point*. This point object may be further defined as having X and Y variables which specify the location of the point. It may be further defined as having a *draw* procedure which draws a dot at the specified location. Once this is done, the program code may look something like this...

point.x=10 point.y=25 point.draw

x and y and the procedure draw are all an integral part of the point object.

OO computing is soon going to be popular outside of programming. For example, suppose that you are working on a document that involves word processing, a spreadsheet, and graphics. In non-OO computing, you load your word processor and do some work. Then, you load your spreadsheet and do more work. Then, you load your graphical program and do more work. The point is that you are exiting and entering different programs for different parts of the same document.

With OO computing, you will load your object, which is the document. Then, you will work on the word processing, spreadsheet, and graphics all together as part of the oject. The programs for these different parts will come and go seemlessly in the background. The central focus of your work will be the object, i.e., the document; not the programs that work on it.

OOC

Out of context. In reference to a character being assumed on the $\underline{\text{Internet.}}$ To be OOC, is to be out of context with that character and to be oneself.

Source: Computer underground Digest, April 12, 1994

Operating System

Essential software which performs the standard operating chores of running a computer. The most popular operating system on personal computers is $\underline{\mathsf{DOS}}$.

OS/2

Operating System 2. An IBM <u>operating system</u> intended to compete with <u>Windows.</u>

Overhead Menu

The horizontal menu which appears across the top of some $\underline{\text{windows}}.$ Whether or not it exists depends upon a programmer.

Panose

A method of numerically categorizing types of fonts.

Source: Byte, May, 1994

Parallel Port

A computer connection commonly used for a printer. The information runs along parallel lines. A personal computer often has two or four parallel ports which are called <u>LPT1</u>, LPT2, LPT3, and LPT4. The printer is usually connected to LPT1.

Compare with <u>serial port</u>.

Parameter

Information which is passed to a program or subroutine. It could be numbers, words, $\underline{switches}$, files, or other information.

PATH

(1) The location of a directory. Some possibities are...

\
DIR1
\DIR1
\DIR1\DIR2
\DIR1\DIR2
\DIR1\DIR2\DIR3
\DIR1\DIR2\DIR3\DIR4

(2) A statement in the $\underline{\text{AUTOEXEC.BAT}}$ file that tells $\underline{\text{DOS}}$ where to look for program files. Example...

PATH C:\;C:\DOS;C:\BATCH;C:\UTILITY;C:\WINDOWS;C:\ZIP

PCMCIA

Personal Computer Memory Card International Association. Also, People Can't Memorize Computer Industry Acronyms. It refers to a system of using credit card sized connectors to attach peripherals to computers.

The cards come in three sizes, with Type I being the most thin, Type II being in the middle, and Type III being the most thick.

PCTV (Personal Computer Television)

A combination of the computer and the television.

PEN (Public Electronic Network)

A network sponsored by the government of Santa Monica, CA.

Source: Wired, v2, n1.

Period

A period (.) is used to divide a filename from an extension. For example, in EXAMPLE.TXT, the filename is EXAMPLE and the extension is TXT.

Pixel

A single dot on a <u>video monitor</u>. *Pixel* stands for *picture element*.

The pixels in a monochrome monitor correspond directly to <u>bits.</u> If a bit is set, then that pixel is turned on.

Color monitor pixels are much more complicated because it is not just a matter of whether the pixel is on, but which color it is. The number of colors a monitor can display depends upon how many bits are assigned to each pixel. The more bits, the more colors. Also, the more memory needed by the monitor.

The CGA monitor can display four colors at once because only two bits are assigned to each pixel, like this...

- 00 Color 1
- 01 Color 2
- 10 Color 3
- 11 Color 4

the EGA monitor assigns four bits to each pixel and can display up to 16 colors at once...

0000 Color 1

0001 Color 2

0010 Color 3

0011 Color 4

0100 Color 5

0101 Color 6

0110 Color 7

0111 Color 8

1000 Color 9 1001 Color 10

1010 Color 11

1011 Color 12

1100 Color 13

1101 Color 14

1110 Color 15

1111 Color 16

The VGA monitor assigns eight bits to a pixel and can display up to 256 colors at once.

Note that a pixel's bits in memory may not be contiguous.

PKUNZIP

The name of a popular program which is used to decompress files which were compressed with \underline{PKZIP} . It is also the $\underline{keyword}$ to start the program. The compressed files are often called ZIP files and have a .ZIP filename extension.

PKZIP and PKUNZIP are registered trademarks of PKWARE, Inc.

In its simplest form, PKUNZIP can be entered by itself at the $\underline{\sf DOS\ prompt}$ like this...

D1:\PATH1> PKUNZIP

...at which time the program will display information about itself on the screen.

PKZIP

The name of a popular program which is used to compress files. Also, it is the <u>keyword</u> to start the program. The compressed files are often called ZIP files and have a .ZIP filename extension. They are decompressed with the <u>PKUNZIP</u> program.

PKZIP and PKUNZIP are registered trademarks of PKWARE, Inc.

In its simplest form, PKZIP can be entered by itself at the $\underline{\sf DOS\ prompt}$ like this...

D1:\PATH1> PKZIP

...at which time the program will display information about itself on the screen.

Playboy v. Frena

A lawsuit in which Playboy's copyrights of <u>scanned</u> photographs were upheld. This meant that Playboy pictures could not legally be scanned by others (in this case, Tech's Warehouse BBS) and placed on <u>BBS's</u> for distribution.

Source: Boardwatch, April/May, 1994.

Point and Click

To point the mouse cursor at something while clicking the <u>primary mouse</u> <u>button</u>. It is used like this: Point and click at the book, which means to point the mouse cursor at the book and click the primary mouse button.

Pointer

The > character in the DOS prompt. For example . . .

A:

... means put your instruction here.

Be aware that the word *pointer* in programming has a different meaning that refers to a location in the computer's memory.

Pop-Up Definition

A definition or explanation associated with a <u>hot spot</u> which has the primary characteristic of being temporary. It pops up over the current page instead of replacing the page. It is just big enough to hold its contents. It disappears as soon as the <u>primary mouse button</u> is clicked, again. Here is a pop-up definition of <u>pop-up definition</u>.

Pop-Up Window

A <u>window</u> in the <u>Windows help system</u> which pops up over an existing window (as opposed to replacing it). Pop-up windows are relatively small and temporary. They are commonly used for <u>pop-up definitions</u>, although other uses are possible.

Poster

Someone who posts a message.

Source: Computer underground Digest, April 12, 1994

Poulson, Keven Lee

A hacker who allegedly manipulated the phone system to be the 102nd caller to radio station KIIS-FM to win a \$50,000 Porsche. He is currently serving more than 100 years for computer and phone related crimes. He allegedly disabled the phones of "Unsolved Mysteries" to keep watchers from calling in.

Source: Computer underground Digest.

Power Supply

Specifically, a small metal box inside the computer cabinet which often contains a fan and which receives current from a receptacle and distributes it to components.

A 24-watt power supply is considered environmentally friendly.

PPL

PCBoard Programming Language. A way of programming additions to PCBoard, a program which runs a BBS. PPL is compiled with the PPLC (PCBoard Programming Language Compiler) into a .PPE (PCBoard Program Executable) file.

Source: Boardwatch, April/May, 1994.

Printers

Single-density graphics on a dot-matrix printer are 60 dpi (dots per inch). Double-density is 120 dpi. Quadruple-density is 240 dpi.

Laser printers have been printing at a resolution of 300 dpi. However, some are now printing at 600 dpi.

Typeset quality is from 1,200 dpi to 2,450 dpi.

Primary Mouse Button

The standard <u>mouse</u> button which normally makes things happen. It could be any of the mouse buttons. On a right-handed mouse, it is usually the button on the left. On a left-handed mouse, it is usually the button on the right. It is often the button which is naturally below your pointer finger when you are holding the mouse. If you are not sure which one it is, try each button slowly, one at a time, until you figure it out. While sometimes other mouse buttons also have functions, often the primary one is the only one which is active.

Of buttons on the left and right, the other button is the secondary mouse button. If there is a middle button, it is simple called the middle button.

PROGMAN

Short for $\underline{\mathsf{PROGram\ MANager}}.$ The main program distributed with $\underline{\mathsf{Windows}}$ that contains the icons to start other programs.

Program Manager

The main program distributed with $\underline{\text{Windows}}$ that contains the icons used to start the other programs. Also called PROGMAN.

Program

The difference between software and programs is like the difference between sugar and sugar cubes.

Software is one or more instructions which may assist in running a computer. It can exist in various places in memory--like sugar spilled on a table top.

A program is software organized to accomplish one or more tasks, such as word processing. It has cohesion--like a sugar cube.

Push Button

A button.

RAM

Random Access Memory. Next to the bit, RAM is the most important thing that makes computers so powerful.

The RAM is a large collection of bytes. Each byte has its own address. If a program is looking for a certain byte, it can use the address to find that particular byte. The opposite of this would be if the program had to start at the beginning and look at each byte until it found the one it wanted.

The best way to understand RAM is to compare it with storage on a magnetic tape. Some computers store their bytes on cassette tapes rather than disks. If a program needs a byte at the opposite end of the tape, it has to wind the tape all the way to the other end to get to the byte. This is not RAM. The program cannot go immediately to the byte it wants, it has to read through other bytes, first.

RAM is stored on chips inside the computer. These chips are constructed so that each byte on the chip has its own address. When a program needs a particular byte, it does not have to search through all of the chips. Nor does it have to search through all of the bytes on any one chip. The program can go directly to the byte it needs.

RAM helps to account for the incredible speeds that computers have.

RAM is often also simply called *memory*.

Compare RAM to ROM (Read-Only Memory). Both are types of memory stored on chips. The difference is the information in RAM is changeable, whereas the information in ROM is permanent. Also, the information in RAM is lost when the computer is turned off. The information in ROM is not lost when the computer is turned off.

Read

To find a file on a disk and place the file in memory. Note that the file then exists in both places.

README

A text file included with many programs that explains how to start or install the program. Some of them have information which is not included in the manual. The README file has many variations, such as...

README.1ST README.TXT README.DOC READ.ME

Refresh Rates

How often a video display is redisplayed in order to reduce fading.

70 Hz (hertz) is a good rate.

142 Hz is an excellent rate.

Register

A memory slot in a <u>CPU</u> which holds data to be worked on. Other than moving data, a CPU cannot work on data unless it is placed in a register first. The size of a register, measured in <u>bits</u>, determines how much data a CPU can process, at once. Generally speaking, the larger the registers, the faster the CPU. Here are the register sizes of some popular CPU's...

8086	16 bits
8808	16 bits
80286	16 bits
80386	32 bits
80486	32 bits

Registered Version

The paid-for copy of a **Shareware** program.

Restore

To shrink a $\underline{\text{maximized window}}$ to its regular size. This is accomplished by selecting the $\underline{\text{maximize button}}$ when it has double arrows. It can also be done by $\underline{\text{double-clicking}}$ on the $\underline{\text{title bar}}$.

Restore Button

The same thing as the <u>maximize button</u> when a <u>window</u> is the full screen size and the button has a double arrow. Selecting the button at this time restores the window to a regular size.

Right Arrow (Scroll Bar)

<u>Point and click</u> on the right arrow of a <u>horizontal scroll bar</u> to <u>scroll</u> the contents of a <u>window</u> a small amount towards the right of the text. The text, itself, goes to the left.

See illustration.

RIME

Relaynet International Message Exchange. A worldwide <u>network</u> of over 900 <u>BBS's.</u> A distinguishing feature is that the BBS's are not connected in real time. They transfer messages by calling each other in sophisticated relays, which are usually automated in the middle of the night.

Source: Online Access, May, 1994

Ring 0

The most unrestricted access level to a <u>CPU</u>. Intended for use by <u>operating systems</u>.

For example, programs (not in Ring 0) should only have access to the memory allocated for themselves. They should not have access to memory allocated for other programs. Operating systems (in Ring 0) have access to all of the memory used by all of the programs.

RISC

Reduced instruction set chip. Typically used on high-powered <u>workstations.</u> The opposite is the CISC (complex instruction set chip), which is what most personal computers use.

Top producers of RISC workstations are Sun Microsystems, Hewlett-Packard, IBM, Digital Equipment Corp., Silicon Graphics, Intergraph Corp., and NEC Technologies.

Rivest, Ronald

A leading cryptographer.

Source: Computer underground Digest, May 1, 1994.

ROM

Read Only Memory.

Information stored in ROM stays there even when the computer is turned off. However, you cannot change it. ROM is physically located on chips inside your computer.

ROM is used by the manufacturer to keep the software which starts the computer when it is turned on. In some IBM brand computers, the BASIC programming language is kept in ROM. On some Tandy computers, MS-DOS is also kept in ROM.

ROM BIOS

ROM stands for Read Only Memory and refers to a memory chip which is installed inside the computer when it is manufactured. BIOS stands for Basic1 Input/Output System and is software which runs the individual devices of a computer, such as the keyboard.

The ROM BIOS is therefore the BIOS that arrives on a chip inside the computer. Contrast this to the MS-DOS BIOS which is in the IO.SYS file on a disk (or ROM) containing MS-DOS.

Root

The main directory on a disk. It is represented by a backslash (\). Other directories can grow off of it like branches growing on a tree.

Rotenberg, Marc

Director of EPIC.

Source: Computer underground Digest, May 1, 1994.

Route 666

The information superhighway.

Source: Al Expert, March, 1994.

Salsa

As in *chips and salsa*. Refers to hardware and software. *Salsa* is the software.

Source: Wired, June, 1994.

SAP (Service Advertising Protocol)

A procedure where a network sends a notice to its terminals indicating what services are available.

Source: PC Magazine, May 31, 1994.

Scan

To convert images from paper to digital forms which can be stored and displayed by computers. This is done with a scanner, of which there are two types: (1) a hand scanner is held and moved across the image to be scanned; and, (2) a page scanner, in which the paper containing the image is placed into the scanner. The page scanner produces better images because it is more steady, however it costs more.

Scroll

Noun, an ancient manuscript, such as the Dead Sea Scrolls. It is used conceptually to visualize how text is moved behind a <u>window</u>.

See illustration.

Verb, to move the contents of a window up, down, left, or right. Note that in DOS, scrolling is up, only: whatever goes off the top of the screen is lost.

Scroll Bar

A device used to move the contents of a <u>window</u> up, down, left, or right.

Here is a circled vertical scroll bar.

Here is an isolated horizontal scroll bar.

A scroll bar has four parts: (1) An arrow pointing <u>up</u> or <u>left</u>, (2) an arrow pointing <u>down</u> or <u>right</u>, (3) a <u>bar</u>, and (4) a <u>thumb button</u>. The thumb button indicates what part of the text is currently displayed in the window. It can be moved along the bar, by <u>dragging</u> it with the <u>mouse cursor</u>, to <u>scroll</u> the text. <u>Pointing and clicking</u> on the bar on any side of the thumb button moves one page towards that direction in the text. Pointing and clicking on an arrow moves one line towards that direction in the text.

In applications besides the <u>Windows help system</u>, a scroll bar may be used to move or change something besides text.

Scroll Box

Another name for the <u>thumb button</u>, which see.

Search Button

One of the <u>help buttons</u> in a <u>help window.</u> The search button brings up a $\underline{\text{dialog box}}$ to assist a user in finding a $\underline{\text{topic.}}$

See illustration.

Select

To choose and activate something, such as an <u>icon</u>, <u>button</u>, or menu item. This is often done by <u>pointing and clicking</u> with a mouse or by using a <u>hot key</u>.

Serial Number

A random number assigned to disks in MS-DOS versions 4.0 and greater. The serial number is stored magnetically on the disk.

Serial Port

A computer connection to a single line (as opposed to <u>parallel</u> lines). Serial ports are often used for <u>modems</u> and mice, as well as other peripherals. They are also called communications ports, or simply <u>COM</u> ports. A personal computer typically has up to four COM ports, numbered like this: COM1, COM2, COM3, and COM4.

Shannon Number

10^120. The total possible number of moves in a chess game. Named for Claude Shannon, who calculated it.

Shareware

Programs which users may try before they buy. The programs are typically distributed via BBS's, catalogs, CD's, and rack sales, as well as other means. Users may try them out before paying for them. If a user finds a program useful, then he or she is obligated to send a registration fee to the author, thus paying for the program.

Shareware distribution gives users a chance to try software before buying it.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights.

Shareware authors are accomplished programmers, just like commercial authors, and the programs are of comparable quality. (In both cases, there are good programs and bad ones!)

Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook, whether it's commercial or Shareware. The Shareware system makes fitting your needs easier, because you can try before you buy. And because the overhead is low, prices are low also. Shareware has the ultimate money-back guarantee -- if you don't use the product, you don't pay for it!

Commercial users of shareware should register and pay for it within 30 days of first use or their license is withdrawn. Site-license arrangements can be made by registering.

You are encouraged to pass a copy of Shareware along to your friends for evaluation. Please encourage them to register their copy if they find that they can use it.

Simple Bucky

A keystroke combination involving holding down a special key while another key is pressed. For example, is a simple bucky and is a three-step process:

- Hold down the key.
 Press and let up the key
- 3. Let up the key.

It's like holding down the key to get a capital letter, except you hold down the key, instead. Another key often used in buckies is the key.

See also, Extended Simple Bucky.

Sizes

A **bit** is a single switch which is either on or off.

A **byte** is eight bits.

The following can refer to bits, bytes, or other things...

<u>Notati</u>	<u>Approximat</u>	<u>Actually</u>	<u>Power</u>
<u>on</u>	<u>ely</u>		
Kilo	Thousand	1,024	2^10
Mega	Million	1,048,576	2^20
Giga	Billion	1,073,741,824	2^30
Tera	Trillion	1,099,511,627,776	2^40
Peta	Quadrillion	1,125,899,906,842,624	2^50

The following list indicates the comparative sizes of various things.

Size	Item			
	The size of a standard 80-by-25			
2,000 Bytes	character text video screen. (Used for			
	comparison.)			
	A double-sided, double density, 5.25-			
360 K	inch floppy disk. Enough space to hold			
	184 standard text video screens.			
	A double-sided, double density, 3.5-inch			
720 K	floppy disk. Enough space to hold 368			
	standard text video screens.			
	A high-density, 3.5-inch floppy disk.			
1.44 M	Enough space to hold 737 standard text			
	video screens.			
	A hard disk that can hold 52,428			
100 M	standard text video screens.			
	The amount of data a CD-ROM			
650 M	(compact disk, read-only memory) can			
	hold. Over 340,787 standard text video			
	screens.			
	The total amount of data the Pioneer			
11 G	DRM-1804X 18-Disk CD player can			
	hold.			
	The amount of traffic on the <u>NSFNET</u> on			
10 T	the <u>Internet</u> in February, 1994.			
	The estimated size of all the world's			
95 T	movies in compressed format. Over 52			
	billion standard text video screens.			

Slash

The slash is the / character. It is used to indicate to MS-DOS that a switch is being used. Compare with $\underline{\text{backslash}}$.

SLIP (Serial Line Internet Protocol)

A method of connecting to a network via a telephone line.

SlopView

A reference to IBM's TopView.

Source: PC Magazine, May 31, 1994.

Smart Terminal

A computer terminal which not only accesses a computer, but is, itself, a computer. Contrast with <u>dumb terminal.</u>

Snooperware

A reference to the Clipper Chip.

Source: Online Access, May, 1994.

Software

Software means computer code.

Usually, software means a program. All programs can be referred to as software. However, not all software is a program.

Some software, such as interrupts, are subroutines which remain in the computer's memory and can be used by any program.

Software Interrupts

Software interrupts are particular subroutines which are readily available in a computer's memory and may be used by any program. They are called "interrupts" because a program is interrupted to run the subroutine.

Spooler

A method of sending data to a temporary location which, at the same time, is holding it and sending it to another location. Usually used in reference to printers and called a *print spooler*. Imagine a spool of thread where the thread leads in at one end, wraps around to the other end, and then leads out.

Compare with cache.

Stego

An encryption scheme where data is hidden in graphics. In principal, one bit per pixel is used to store data. The color is not changed enough for the human eye to notice, and would-be code-breakers are not aware that data is even there.

Source: Wired, March, 1994.

Steshenko, Gregory N.

An emigre from Ukraine, has filed a \$2 million suit against the University of Texas at Dallas, where he is a student, for cutting off his access to <u>Internet</u> because of alleged conduct in discussions concerning Russia and Ukraine.

Source: Dallas Morning News.

Subroutine

Program code which is intended to be used by other program code.

Subroutines are pieces of software which accomplish repetitive tasks. Compare subroutines to the phrase "reinventing the wheel." If a programmer needs to do something over and over, he will write the software once, and have the program use the same software again and again. The opposite of this would be to rewrite the software each time (or "reinventing the wheel" each time).

Most programs are almost entirely subroutines. The main program code calls a subroutine, which calls another subroutine, which calls another subroutine, on and on, hundreds, thousands, or more times. Subroutines can be a part of the <u>operating system</u>, part of <u>Windows</u>, part of the program, or elsewhere.

Surfing

Varies depending upon usage.

Shoulder Surfing refers to looking over people's shoulders while they make phone calls so that one can steal their code numbers.

Net Surfing means traveling about the <u>Internet.</u>

Silicon Surfing means standing on a virtual surfboard and surfing an abstract virtual reality.

Switch

A <u>parameter</u>, entered with the <u>keyword</u> at the <u>command line</u>, that turns an option in a program on or off.

In <u>DOS</u>, the switches are preceded by /. For example, to pause while displaying a directory listing, the command is <u>DIR</u> /P. The switch in this case is /P.

In $\underline{\mathsf{PKZIP}}$, the switches are preceded by -. For example, to display help, the command is $\underline{\mathsf{PKZIP}}$ -h. The switch in this case is -h.

The word *switch* can also refer to a bit which is either on or off, kind of like a room light switch.

Syntax

The way that commands are entered.

In high school English, *syntax* means how sentences are constructed. Nouns, verbs, and other types of words must be put together correctly to form a proper sentence.

In MS-DOS, the commands must also be put together correctly in order for MS-DOS to figure out what you want it to do.

Getting the syntax correct is probably one of the most frustrating things you will have to do with MS-DOS.

Manuals often show a syntax diagram. Here is a sample one for the DIRectory command:

DIR [drive:][path][filename][/P][/W]

At first, these syntax diagrams seem virtually unreadable, but after a while you should learn how to interpret them.

In contrast, here is the syntax for the simplest use of the DIR command:

DIR

All you have to do is enter the command, itself (DIR). Here is the syntax for the DIR command when a specific disk drive is entered:

DIR D:

Where *D* stands for *drive*. Sample actual usages of this form would be ...

DIR A:

... and ...

DIR C:

Now, here is the syntax for specifying the root directory:

DIR \

The backslash (\) is a symbol which means the *root directory.* In the above case, the syntax and the way the command is entered are exactly the same.

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()	ne	m	റ	rဝ	•

DIR D:\

The above command specifies the root directory of the "D:" drive.

Tabulate

Abbreviation for TABulate. The key.

Task Swapping

A feature allowed in the DOS Shell and Windows and some other programs which allows you to run, or appear to run, several programs (tasks) at a time and switch between them.

TCP/IP

Transmission Control Protocol/Internet Protocol. A method of data transfer used by Internet.

Telecommuting

Working at home on a computer connected by modem to the office.

Source: Online Access, September, 1993.

TEMP

The name of a directory often used for TEMPorary files. You know later that any of the files in this directory can be erased. A TEMP directory is commonly used in trying out new programs downloaded from BBS's. The zipped file is first downloaded to a DNLD directory. Then, it is unzipped to a TEMP directory where it is looked at or tried out. Then, if kept, it is copied to a permanent directory.

Thick Border

<u>Windows</u> which can be resized have thick borders. Windows which cannot be resized have thin borders. This is something which is determined by programmers. However, the width of borders can also be influenced by users who can make them thicker and thinner. Therefore, it can only be said that thick borders are relatively thicker than thin borders. The actual border size can vary. See flexibility.

Thin Border

<u>Windows</u> which can be resized have thick borders. Windows which cannot be resized have thin borders. This is something which is determined by programmers. However, the width of borders can also be influenced by users who can make them thicker and thinner. Therefore, it can only be said that thick borders are relatively thicker than thin borders. The actual border size can vary. See flexibility.

Thumb Button

A button which moves along the <u>bar</u> of a <u>scroll bar</u> indicating what part of the text of a <u>window</u> is being displayed. If it is at the top of a <u>vertical scroll bar</u>, the top of the text is showing. If it is at the bottom, the bottom of the text is showing. If it is on the left of a <u>horizontal scroll bar</u>, the left edge of the text is showing. If it is on the right, the right edge is showing. The thumb button can move proportionately along the bar, too, indicating which part of the middle of the text is showing. The text can be <u>scrolled</u> by <u>dragging</u> the thumb button with the <u>mouse cursor</u>.

The direction you move the thumb button is the direction you move towards in the text.

See illustration.

Title

An optional name given to a <u>window</u> by a programmer. Sometimes called a <u>caption</u>. If there is one, it appears in a <u>bar</u> over the top of a window. This bar is called a <u>title bar</u> or a <u>caption bar</u>. Three configurations are possible:

- 1. No title or title bar is present.
- 2. A title bar is present, but no title.
- 3. A title is present inside a title bar.

Title Bar

An optional <u>bar</u> which appears over the top of a <u>window</u>. A programmer determines if it exists. If a window has a <u>title</u>, it appears in the title bar. The <u>mouse cursor</u> can <u>drag</u> a title bar to move a window. Also, one can <u>double-click</u> on the title bar to <u>maximize</u> and <u>restore</u> a window.

Programmers call a title bar a caption bar.

Topic

In the <u>Windows Help System</u>, a topic is the material that can be presented in one <u>window</u> at at time. It includes the material that can be scrolled into the window. When a <u>hypertext</u> jump is made, the user is switching from one topic to another.

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Microsoft Corporation

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Q+E

Apple Computer, Inc.

QuickTime

Sony Corporation.

Sony

Apple Computer, Inc.

TrueType

Digital Equipment Corporation.

Ultix

UNIX Systems Laboratories.

UNIX

Microsoft Corporation

Visual Basic

Microsoft Corporation

Win32

Transistors

Transistors are switches which control the flow of electricity. They are called *solid state* because they are made out of solid material (as opposed to liquids or the gases in vacuum tubes).

Transistors have several advantages over vacuum tubes:

They are smaller
They are tougher
They use less electricity
They make less heat
They are faster

Transistors are made out of semiconductors. What this funny word means is that solid material used in transistors can be used to control the flow of electricity.

Think of it this way:

A conductor transmits electricity. A non-conductor does not transmit electricity. A semiconductor transmits some electricity.

Whether or not electricity is conducted in a semiconductor depends upon the status of nearby electrical circuits. Electrical fields of some circuits turn on or off the electrical fields of other circuits, which can influence yet other circuits. Thus, semiconducting material can be used as switches to control bits and bytes.

Tree

A disk's directory structure.

It is called a *tree* because the main directory is the root, and other directories grow off of it. Computer files are like leaves which can be on any branch (in any directory).

Unicode

A <u>two-byte</u> based character set which will probably replace <u>ASCII</u> and other common character sets. The issue is that current characters sets only have one-byte characters, which limits them to 256 possibilities of characters. This problem has been addressed, so far, by switching between character sets. <u>Windows NT</u> has introduced Unicode which uses two bytes per character. Since every additional <u>bit</u> doubles the possibilities, Unicode can handle 65,536 characters, allowing for the handling of all the major languages and other special characters, as well.

Uninstall

An MS-DOS feature in versions 5.0 and higher which allows you to reinstall your previous version of DOS.

Unix

Pronounced *eunuchs*. Also written *UNIX*. An <u>operating system</u> allowing multiple users on a mainframe or other high performance computer. The most widely used such operating system in the world. Favored by <u>hackers</u>. Used by <u>Internet</u>. Created by Ken Thompson in 1969.

Unix is play on words on Multics, its predecessor. Multics stands for Multiplexed Information and Computing Service.

The names of some versions of Unix are BSD (Berkely System Distribution), Linux (Linus Unix), NetBSD, SCO Unix (Santa Cruz Operation), SunOS (Sun Operating System), and System V.

Unzip

To decompress a **ZIP file** with **PKUNZIP**.

Up Arrow (Scroll Bar)

 $\frac{\text{Point and click}}{\text{on the up arrow of a }} \text{ on the up arrow of a } \underbrace{\text{vertical scroll bar}}_{\text{to scroll}} \text{ to } \underbrace{\text{scroll}}_{\text{the contents of a }} \text{ window}_{\text{one line towards the top of the text.}}$ The text, itself, moves down.

See <u>illustration</u>.

UPLD

A common directory where files are placed in preparation for uploading them to $\underline{\mathsf{BBS's}}$. Once you have one, you can set your communications software to look in this directory for files to be uploaded. The opposite of an UPLD directory is a $\underline{\mathsf{DNLD}}$ directory.

Vacuum Tubes

Vacuum tubes can work as switches which control currents of electricity. Thus, they can manipulate bits and bytes for a computer.

It is not correct to think of a vacuum tube as being on or off. What is on or off is a current of electricity which flows through the vacuum tubes. Vacuum tubes control bits and bytes by controlling the flow of this electricity.

The early computers which used vacuum tubes were not practical. They were too big, used too much electricity, and were too unreliable. The personal computer you are using right now is many times more powerful than any computer based on vacuum tubes.

VAX (Virtual Address eXtension)

A type of minicomputer.

VERONICA

Very Easy Rodent-Oriented Netwide Index to Computerized Archives.

Source: Boardwatch, March, 1994.

Vertical Border

The left or right edges of a <u>thick border</u> in a <u>window</u>. They can be used to resize a window in left and right directions. It is difficult to do, but once you position the <u>mouse cursor</u> on the border, the cursor changes into a double arrow. Then, you can <u>drag the mouse</u> to resize the window. Compare with <u>corner border</u>, <u>horizontal border</u>, and <u>thin border</u>.

Vertical Scroll Bar

A <u>scroll bar</u> which is oriented in a vertical position. It is used to <u>scroll</u> text up and down. If all the text fits in the <u>window</u>, and a vertical scroll bar is not needed, it is not shown. Compare with <u>horizontal scroll bar</u>. Look for a vertical scroll bar on the right edge of a window.

See illustration.

ViaCrypt

The commercial version of PGP (Pretty Good Privacy), an encryption program.

Video Monitor

Also called a video screen or screen. The television-like component of your computer that displays graphics and information. **Many** different types of monitors are in use, although the VGA, and variations of it, is the current standard. Here are some types of monitors...

CGA	Color Graphics Adapter
EGA	Enhanced Graphics Adapter
Herc	Hercules Adapter
Mono	Monochrome
VGA	Video Graphics Array
SVGA	Super VGA

As they progress, they increase the number of <u>pixels</u> they can handle, thus increasing the quality of the displays...

CGA	640 x 200	= 128,000 pixels
EGA	640 x 350	= 224,000 pixels
Herc	720 x 350	= 252,000 pixels
Mono	720 x 350	= 252,000 pixels
VGA	640 x 480	= 307,200 pixels
SVGA	800 x 600	= 480,000 pixels
SVGA	1,024 x 768	= 786,432 pixels

As you can see, SVGA is a loose definition that includes different sizes. An SVGA monitor with a 17-inch screen can have 1,280 x 1,024 or 1,310,720 pixels. A 20- or 21-inch monitor can have a resolution of 1,600 x 1,200 (1,920,000 pixels) or higher.

Considering that each pixel for the VGA consists of eight <u>bits</u>, the equivalent of one <u>byte</u>, the amount of memory needed for one screenful of display is 300k. Compare this with the original DOS memory limit of 640k and you see that the amount of memory needed for a monitor is quite large.

Weights of 17-inch video display monitors vary from 44 pounds to 56 pounds.

See also, dot pitch.

Virtual Machine

In the Chicago version of Windows, a part of the hardware and software which acts as though it were a separate computer. Each MS-DOS program is run in its own virtual machine. Also, all of the Windows programs are run in a single virtual machine.

Virtualize Hardware

In a system with <u>virtual machines</u>, to make it appear that one piece of hardware, such as a printer, belongs to each virtual machine.

Source: PC Magazine, May 31, 1994.

Volatile

Computer memory which is lost when the computer is turned off. RAM (Random Access Memory) is volatile. ROM (Read-Only Memory) is not.

Volume

Refers to the volume label, a name stored magnetically on a disk.

Volume Label

An internal name for a disk. It is stored magnetically on the disk and can be read by the disk drive.

Sometimes it is called a volume and other times a label.

The DOS VOL command allows you to examine the volume label, and the DOS LABEL command allows you to change it.

VxD (Virtual x Device)

The *x* stands for the type of device. For example...

VCD Virtual <u>COM</u> device VDD Virtual Display Device

VDMAD Virtual Direct Memory Access Device

VKD Virtual Keyboard Device VMD Virtual Mouse Device

VPICD Virtual Programmable Interrupt Controller Device

VTD Virtual Timer Device

Not all virtual devices follow the same format...

DOSMGR DOS Manager

V86MGR Virtual <u>8086</u> Manager VMM Virtual Machine Manager

You will likely not find any files with these names. However, you may find some of these virtual device drivers, as well as others, referred to in a SYSTEM.INI file, which is probably in your WINDOWS <u>directory</u> on your hard disk.

Source: PC Magazine, May 31, 1994.

Wide Character

A character which is two bytes long, such as a <u>Unicode</u> character.

Source: PC Magazine, v12, n18.

Wildcard

A character which can stand for other characters in a filename. The ? character can stand for any other single character. The * character can stand for groups of other characters.

For example, JULY??.DAT, means any file that begins with *JULY*, then has two more characters, then has an extension of *.DAT*.

*.EXE means any file that has an .EXE extension.

README.* means any file that is named *README*, irregardless of what the extension is.

., often nicknamed *star-dot-star*, means any file. It is actually an *asterisk-period-asterisk*.

Window

A window (lowercase) is a rectangular area of the screen, usually with a border, which contains something. Windows can contain documents, spreadsheets, databases, and other types of information and graphics. Windows can be side-by-side or overlapping. Compare with <u>Windows</u> (uppercase).

Windows NT

Windows (uppercase) is software which runs programs in <u>windows</u> (lowercase). Windows is a trademark of Microsoft Corporation. Windows also does other things and is described in other ways, but this brief definition will do, for now.

Windows NT stands for *New Technology* and is a version of Windows for high-end users of computers.

Windows Help

The help information included with <u>Windows</u>. It gives help specifically on how to use Windows. Compare with <u>Windows Help System</u>.

Windows Help System

A program and a collection of software which is a part of <u>Windows</u> and provides a fairly standardized method of providing help to users of Windows. Other Windows programs can also use the Windows help system. However, the Windows help system can be customized and does not appear exactly the same in all programs.

Windows NT

Stands for Windows New Technology. A high-end version of Windows. See <u>Windows.</u>

Wintif

Windows-Motif. Makes Motif more like Windows.

Source: PC Magazine, May 31, 1994.

Word Hot Spot

A word or phrase <u>hot spot</u>. Word hot spots are highlighted in some way, and may be green and underlined. A <u>pop-up definition</u> word hot spot may be green with a dotted underline. See <u>flexibility</u>. Compare with <u>graphical hot spot</u>.

Workstation

What scientists, engineers, and some other professionals call their high-powered computers.

WOSA (Windows Open Services Architecture)

The collection of application programming interfaces (API's) that Windows uses.

Source: Microsoft Developer Network News.

Write

To store a file on a disk.

X Consortium

An organization at MIT (Massachusettes Institute of Technology) concerning $\underline{X \ Window}$.

Source: PC Magazine, May 31, 1994.

X Window

A <u>GUI</u> for <u>Unix.</u>

Represents the Z disk drive. Almost nobody has a Z: drive, but it is used to illustrate that the possible drive designations in MS-DOS go from A: to Z:.

Zip

To compress one or more files with \underline{PKZIP} .

ZIP File

A file which has been compressed with $\underline{\text{PKZIP}}.$ One usually has a .ZIP extension.

CompuServe Magazine, v12, n11

Items are listed alphabetically, below.

Terms...

Software distributed like Shareware, which see, Bannerware

below, but which its primary purpose is to promote

other software.

A successor to the Clipper Chip.

Capstone

Software which is distributed like Shareware, which

Crippleware see, below, but which is purposely crippled. To get

a working copy, you have to pay a fee.

Software which is distributed like Shareware, which see, below, but for which the author requests a

donation to a charity, rather than a registration fee.

Software which is copyrighted but free.

Freeware

Postcardwa

Donorware

Software which is distributed like Shareware, which

see, below, but for which the author requests just a

postcard rather than a registration fee.

Software which is not copyrighted and can be altered

Public and used in any way.

Domain

re

Software which is copyrighted and for which you pay

Retail in advance.

PC Magazine, v12, n19

Items are listed alphabetically, below.

Terms...

An external subprogram.

Agent

Bitmapped Font

A font which is designed for only one size and is made up of dots (combinations of bits which are either on or off, thus, bitmapped). Compare with

scalable font, below.

Same as Electronic Bridge.

Bridge

A device that connects two different types of buses.

Electronic

Electronic

Bridge

This is like a network of school chalkboards where something written on one of them appears on all of

Whiteboard ther

The bus that an expansion card uses.

Expansion

Bus

A font which is built into the hardware and probably

Hard Font exists on a Read-Only Memory (ROM) chip.

Compare with soft font, which see, below.

For Isochronous Ethernet. Isochronous means

IsoNet occurring at equal intervals in time.

Long. See wchar t, below.

L

A partial Unicode True Type font distributed with

Windows NT.

Lucida Sans Serif With

MBA-Ware

Unicode

Software which goes beyond number-crunching to

help business managers.

Code name for Taligent's object-oriented operation

system.

A document used in a process by which the

Portable document can be moved between different desktop

publishing programs.

The bus that the CPU uses.

Processor

PowerPC

Document

Bus

Pink

A family of reduced instruction set chips (RISC)

made by IBM, Apple, and Motorola and intended to compete with Intel's Pentium. The PowerPC is

actually a family of chips with names like...

601, the standard. 603, for notebooks. 604, more power.

620, 64-bit!

POWER Station/PO WER Server 250 The first computer to use the PowerPC, which see, above. A workstation, it will run DOS, Windows, and Apple software (updated from the Motorola 68000 family of chips).

Scalable Font A font which can be scaled, or drawn, to different sizes. Compare with bitmapped font, above.

Shared Document

A document which can be seen and changed by people on different computers at the same time. For example, one on an electronic whiteboard. A font which can be distributed on a disk like software. Compare with hard font, which see, above.

Soft Font

Same as a suite and a suitcase.

Software Suite

Suitcase

Different programs which are sold together in the same package. For example, a package that contains a word processor, spreadsheet, and database.

Carra as a suit

Suite

Same as a suitcase.

TCHAR.H

A header file required in the C programming language in order for Unicode to be used. See also WCHAR.H, below.

WCHAR.H

A header file required in the C programming language in order for Unicode to be used. See also, TCHAR.H, above.

wchar t

A new kind of character data type for the C programming language which is defined as being an unsigned short integer (16 bits). An L (for *Long*) must preceed strings in quotation marks. For example, here is a character array using Unicode:

wchar_t MyString() = L"My String";

String manipulation functions in the C programming language have different names for Unicode than for single-byte characters.

St. Louis Post-Dispatch, v115, n311

Items are listed alphabetically, below.

From an article on computer crimes...

A program set off to damage a computer at a later

Asynchrono

us Attack

From hacker and safe cracker. A hacker who

Cracker breaks into computers.

From cat burglar. Someone who breaks into

Cybercat computers.

A cracker who is a spy.

Cyberspy

Changing computer data to obtain money or some

other benefit.

time.

Diddling

Data

Computer security that attemps to keep crackers out.

Electronic

Firewall

Passwords which are stored in code, so that a

Encrypted cracker cannot break into a computer and obtain

Passwords other passwords from it.

A program set to damage a computer at some preset

Logic Bomb condition.

The FBI's National Computer Crime Squad.

Nerd Squad

See weaving.

Network

Looping

See weaving.

Piggybackin

g

A BBS which disseminates programs and

Pirate BBS information helpful towards breaking into other

computers.

A legitimate computer device, used to scan images

Scanner from paper into computer graphics, which can also

be used for counterfeiting.

To fake a computer transacation in order to

Simulating accomplish something else.

A computer access card with a chip in it that

Smart Card automatically changes passwords frequently.

Computer software which determines if someone is

Spike making repeated access attempts.

Detector

See weaving.

Stepping

Over

Sophisticated cracking.

Superzappi

ng

A cracker terrorist.

Technoterro

rist

A secret way left by a programmer to get into a

system. Trapdoor

A program which is planted inside another computer

for illicit activity.

Trojan Horse

Worm

Calling one computer, and then using it to call the next, and then using *it* to call the next, and so forth,

Weaving

weaving through networks.
A program that spreads itself throughout a system

using up memory and resources.

Windows/DOS Developer's Journal, v4, n9

Items are listed alphabetially, below.

Terms...

A Windows control which contains another control.

Container Control

Distributed

To spread a computing task among more than one

computer in a network.

Computing

To put data in a packet for transfer across a network.

Marshalling

To remove data from a packet which was transferred

across a network.

UnMarshalli

ng

Boardwatch, v7, n10

The name Boardwatch refers to watching Bulletin Board Systems (BBS's).

Other items are listed alphabectially, below, first the acronyms, and then the names.

	Acronyms
	File Transfer Protocol. The particular method of file transfer used by
F	the <u>Internet.</u>
Τ	
Р	
	Microcom Networking Protocol. An error correction standard for
M	modems.
N	
P	
Г	Pool Life (As appeared to virtual life on a computer)
_	Real Life. (As opposed to virtual life on a computer.)
R	

Names...

Dr. Vinton Cerf	Internet".
	Founder, Hayes Microcomputer Products, Inc, maker
Dennis C.	of Hayes modems, and the creator of the standard
Hayes	AT Command Set, which runs modems.

Dr. Dobb's Journal, v18, n11

Discussion of $\underline{\text{OOP}}$ with mention of possible replacements for $\underline{\text{C++}},$ including...

C+@

Sather

Parasol

Liana

Beta

Eiffel

Drool stands for Dave's recycled object-oriented language. *Dave* is **David Betz**. Other OOP languages mentioned...

Objective-C Turbo Pascal Smalltalk Ada

Forbes, v152, n9

Term...

A chip intended to determine which programs are Wave Chip being used on a CD or on the "information"

superhighway" so that the vendors can get paid.

Names...

Lawrence

Hewlett

Ballmer

Alan C.

John Jay

Bill Gates, cofounder of Microsoft, and the driving William force behind DOS, Windows, and many other

Henry Gates, software products. Worth **\$6.165 billion**.

The other cofounder of Microsoft, is worth \$2.9

Paul G. Allen billion.

Cofounder of Hewlitt-Packard, \$2.75 billion.

David Packard

Sells mainframe computer services, **\$2.4 billion**. Henry Ross

Perot Cofounder of Oracle, **\$1.6 billion.**

Joseph
Ellison
Of Intel, \$1.5 billion. He is the originator of
Gordon Earle
Moore's Law: The power of semiconductors

Moore's Law: The power of semiconductors doubles approximately every 18 months.

Cofounder of Howlitt Bookerd, \$1.4 billion

Cofounder of Hewlitt-Packard, **\$1.4 billion.**William
Redington

Executive vice-president of Microsoft, worth \$1.1

Steven billion.
Anthony

Of Novell, Inc., world's top producer of networking

Raymond J. operating systems, **\$650 million.**Noorda

Cofounder of Oracle, **\$510 million.**Robert N.

Miner

Cofounder of WordPerfect, \$450 million.

Ashton

Cofounder of WordPerfect, \$450 million.

Bruce W.

Bastian

Of BMC Software, \$330 million.

Moores

Cofounder of Quark, Inc., \$300 million.

Tim Gill Cofounder of Quark, Inc., **\$300 million.**

Fred Farhad Ebrahimi

Sells semiconducter materials, \$300 million.

Norman Hascoe

Of Dell Computer, dropped from the list.

Michael Dell

Holds Apple stock. Dropped from the list.

Armas Clifford Markkula, Jr.

Microsoft Developer Network News, v2, n5

Items are discussed, below.

The big news is that <u>Windows</u> is moving towards 32-bit software technology with dual platforms: Mainstream and high-end. For a discussion of 32-bit technology, see <u>CPU</u>.

Mainstream: The mainstream technology is currently represented by **Windows 3.1**, which uses 16-bit software technology so that it can be run on the early <u>8088</u> and <u>80286</u> chips. The next version of Windows under development is code named *Chicago* and moves up to 32-bit technology, thus abandoning the 8088 and the 80286. This means that soon the low-end computer chip will be the <u>386</u>. A notable feature of Chicago is that it will not require <u>DOS</u>.

High-end: The high-end platform is represented by **Windows NT**. *NT* stands for **New Technology**. This is for use by power users, engineers, scientists, technical personnel, and software developers. It is also for use by servers, which are computers that run networks. Windows NT is intended to be used on other chips in addition to Intel chips, such as the **DEC Alpha** and the **MIPS R4000**. The next version of Windows NT is code named **Cairo**.

The newest programming language for Chicago and Cairo is called Visual <u>C+</u> <u>+</u> 32-bit Edition. *Visual* means that the programming can lay out parts of the program visually on the screen, and the compiler will write that part of the code. Because of recent developments, the Windows <u>API</u> is now in different sets...

Win16 For Windows 3.1.
Win32s A subset of the full Win32.
Win32c the API for Chicago.
Win32 The full Windows NT API.

Cairo will futher expand the API. The *lowest common denominator* API for the future is Win32s which will run on both mainstream and high-end Windows platforms. For a diagram of the API sets, see <u>illustration</u>.

Other developing concepts: Unicode, a multilanguage character set about to replace others, such as <u>ASCII</u> and <u>ANSI</u>; and, component software, which is another way of designating programs for Windows, especially in regard to objects.

Online Access, v8, no6

A special issue on <u>Internet</u>. Items are listed, below, in alphabetical order.

Terms...

A program and database which locates files on the

Archie <u>Internet.</u>

From ARPA (Advanced Research Projects Agency)

ARPANET and network. An early experimental network

The government, from the book 1984. Concerning

Big Brother Internet and the proposed "information

superhighway". Just how much surveillance is the government doing or preparing to do on computer

networks?

A news service.

Clarinet

A term similar to *hacker*. Used in science fiction.

Cyberpunk

A free access site to Internet.

Free net

A program that lets you browse.

Gopher

A project that is an expanding collection of books in

electronic format that are available on the Internet.

A trivia game where you try to find information.

Internet

Gutenberg

Low ASCII

Hunt

Communicating with the standard (low) ASCII

characters (as opposed to with graphics).

Dance

A program which lets you access other computer

TELNET systems through Internet.

Internet.

The Net

A network which is older than Internet, but

USENET accessible from many Internet sites.

Maintains an index and provides keywords. Works

Veronica with Gopher.

PC Magazine, v12, n17

Items are listed in alphabetical order, below, first the acronyms, and, then, the terms.

	Acronyms
EI S	Extended industry standard architecture, or Extended ISA. A bus which is competitive with IBM's MCA, which see, below.
A IS	Industry standard architecture. The bus standard for the original IBM personal computer.
A M	Micro Channel Architecture. A bus used on IBM brand personal computers.
C A	Peripheral Component Interconnect. A type of bus.
P CI	Redundant Array of Inexpensive Disks. Instead of keeping
R Al D	data on one large hard disk, it is kept on many smaller hard disks.
S L E	Single Large Expensive Disk. Compare with RAID, above.
D S	Structured Query Language. A common method of finding information in databases.
Q L	Video Electronics Standards Association. A type of bus.
V E S	
A V	VESA local bus, or Video Electronics Standards Association local bus.
L- B us	
V L SI	Very large scale integration. A chip which contains a huge amount of circuitry.

Terms...

One which is broken into pieces which are in various places. Compare with RAID, SLED, and replicated database, below.

What you write on a personal digital assistant Electronic Ink (PDA) that is stored as graphics, before the

computer translates it to characters, words, and

recognizable symbols.

The name of a particular operating system for

personal digital assistants (PDA's).

The name of a particular operating system for

personal digital assistants (PDA's).

The name of a particular operating system for

personal digital assistants (PDA's).

A handheld computer that uses a pen.

Personal Digital

PenDOS

PenPoint

PenRight!

Assistant

Replicated

Database

One where the entire database is located in one place, and has copies in other places. Compare with RAID, SLED, and *distributed database*, above

and below.

The name of a particular operating system for

personal digital assistants (PDA's).

Windows for

Pen Computing

PC Magazine, v12, n18

Items are listed alphabetically, below.

	Acronyms
D	Double-Byte Character Set. A character set that allows two bytes
D B	per character, such as Unicode.
C S	
S	Network Basic Input/Output System Extended User Interface
N	
e t	
В	
E U	
Ĭ	
0	Open Software Foundation/Distributed Computing Environment
S F	
F /	
D	
C E	
	Universal Asynchronous Receiver/Transmitter
U A	
R	
Т	

Windows Sources, v1, n10

Items are listed alphabetically, below.

Terms...

The DOS included in Microsoft's project codenamed *Chicago*.

DOS 7.0 named Chicago

The smaller version of Windows in Hewlitt-

Modular Packard's Omnibook.

Windows

Microsoft's project code-named Chicago.

Windows 4.0

A reference to the family of chips including the

x86 8088, 80286, 80386, and 80486.

Association of Shareware Professionals, December, 1993

Items are listed, below.

Acronyms...

CompuServe Information Services. The name of a particular large

network.

S

С

Shareware Reference Guide. A series of 10 catalogs of Shareware

S programs in WinHelp format.

R G

Terms...

The big news is 10 SRG catalog files which will be distributed on BBS's and networks. They are listed, with other items, below.

Canada Remote Systems. The name of a particular

CRS Online large BBS.

The main SRG catalog. Lists all known Shareware.

SRGMNxxx

.ZIP

Lists updates to main catalog.

SRGUPxxx.

ZIP

ASP Shareware, only.

SRGASxxx.

ZIP

CompuServe Shareware, only.

SRGCSxxx.

SRGSRxxx.

ZIP

CompuServe Shareware, only, which can be

registered on CompuServe.

ZIP

GEnie Shareware, only.

SRGGExxx.

ZIP

DOS Shareware, only.

SRGDSxxx.

ZIP

OS/2 Shareware, only.

SRGO2xxx.

ZIP

Windows Shareware, only.

SRGWNxxx

.ZIP

Windows NT Shareware, only.

SRGNTxxx.

ZIP

Boardwatch, v7, n11

С

С

A P H

F

С

C S E T

G

T S

Η

P C C

H P

С

С

Т

D E

Α

T F

Τ

A R

О

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Communications and Computer Applications in Public Health. A convergence of Clinton/Gore's NII Agenda for Action, which see, below, and their health care proposal.

Federal Coordinating Council for Science, Engineering, and Technology. Mentioned in the NII Agenda for Action, which see, below.

Government Information Technology Services. Part of the NII Agenda for Action, which see, below.

High-Performance Computing and Communications Program. Part of the NII Agenda for Action, which see, below.

High Performance Computing, Communication, and Information Technology. Not the same as HPCC, which see, above. A subcommittee of the FCCSET, which see, above. Mentioned in the NII Agenda for Action, which see, below.

International Data Encryption Algorithm. Used by Pretty Good Privacy (PGP) the private encryption program in competition with the federal government's encryption system which the government can monitor.

Information Infrastructure Task Force. Part of the NII Agenda for Action, which see, below.

International Traffic in Arms Regulations. Phil Zimmermann, the author of Pretty Good Privacy (PGP), a competing product to the federal government's encryption product, which it can monitor, is being investigated for possible violations of ITAR by posting PGP to Internet.

Library of Congress. Now, parts of it are available on America Online, a bulletin board system.

NI	National Telecommunications and Information Administration. Part
N T	of the NII Agenda for Action, which see, below.
1	
Α	Notice of Technical Information Comics. The federal expressible
N	National Technical Information Service. The federal agency which runs FedWorld, which see, below.
T	Turis i ediviona, which see, below.
1	
S	Vice Breeident Court National Before an Breine of which the NIII
N	Vice President Gore's National Performance Review, of which the NII Agenda for Action, which see, below, is a part.
P	Agonaa tor Action, which ood, bolow, to a part.
R	
Т	Toxic release inventory. A sample of federal government information released through a bulletin board system. Mentioned in the NII
r R	Agenda for Action, which see, below.
Ī	g
-	Technology Reinvestment Project. Mentioned in the NII Agenda for
T R	Action, which see, below.
P	
	Universal Coordinated Time. (The character placement has to do
U T	with the French pronounciation.)
Ċ	
C	

Terms...

See NII Agenda for Action, below.

Agenda for Action

Novell DOS. Used to be called DR-DOS.

DOS 7.0

FedWorld

Internaut

MicroServe

The name of a competing program to MS-DOS.

DR-DOS The DR stands for Digital Research.

A federal government bulletin board system. Part of

the NII Agenda for Action, which see, below.

Fouled up beyond all repair. Also spelled foobar.

Fubar

From astronaut. Someone skilled at getting around

in Internet.

A rumor of a network which will be offered by

Microsoft.

See MicroServe

Microsoft

Online

Service

The Clinton/Gore proposal for the National

Information Infrastructure, also known as the

"information superhighway."

The new name for DR-DOS.

Novell DOS

NII Agenda for Action

Right-to-know network. Run by the federal

government and mentioned in the NII Agenda for **RTK Net**

Action, which see, above. A component of the "information superhighway."

Skyway

The C Users Journal, v11, n12

Items are listed below.

Acronyms...

Adelson-Velskii-Landis. Developers of a height-balanced tree,
which is a programming method to store data in a manner which
allows efficient access.

Borland Graphic Interface. A set of graphical subroutines for use
with Borland programming languages.

G
I
Threaded AVL (see AVL, above). Threads are programming
methods to allow even more efficient access to data.

A

Terms...

CA-Clipper

Clipper

dBase

Dictionary-Based Coding

Huffman Coding Computer Associates Clipper (to distinguish it from the Clipper Chip, a federal government encryption device). It is the name of a programming language. Formerly, a dBase compiler. Now, as CA-Clipper, a general programming language. The name of a particular database program.

A method of data compression which substitutes special characters for the most often used words. Compare with Huffman Coding, below.

A data compression algorithm that is character-based (as opposed to dictionary-based, which see, above). Uncompressed characters take up 8 or 16 bits each. Generally speaking, Huffman coding represents the most used character by the single bit 0; the second most, by the two bits 10; the third most, by the three bits 110; the fourth most, by the four bits 1110; etc. (A table keeps track of which bit combinations represent which characters.) For example, the bit stream 111101000110 would be comprised of the characters 11110, 10, 0, 0, and 110. The decompression process would look these digit combinations up in the table to determine what characters to put in their places.

Computer underground Digest, v5, n87

Items are listed, below.

Terms...

The subculture of BBS and network computer users.

Cybercultur

Rosetta

Stone

A proposed encyclopedia to be written on the

Interpedia Internet.

An ancient tablet with the same thing written in three

different languages. Scientists used the two languages they knew in order to learn the third language. Used in reference to a method of breaking computer encryptians today if similar

information is available.

EFFector, v6, n3

Items are listed, below.

Acronyms...

European Conference on Computers, Freedom, and Privacy.

Ε C F Ρ

National Center for Automated Information Research.

Ν С Α R

Terms...

Someone who believes that the public should have Cypherpunk

access to powerful encryption programs.

Refers to Pretty Good Privacy (PGP), the powerful encryption program released by Phil Zimmermann to The Genie the public. As in, "you can't put the genie back in the bottle." Too many copies now exist for the

government to ever retrieve them all.

Microsoft Developer Network News, v2, n6

Terms...

With 32-bit processors, the size of an integer (for these machines, only) has doubled from 16 bits (two bytes) to 32 bits (four bytes). 32-bit

Integer

A conceptually inferior window associated with

another window. For example, in a word processing program, a window holding a document might be a Child Window

child window to the window which holds the

program, itself.

Integer.

int

Microsoft Systems Journal, v9, n1

Items are listed alphabetically, below, first acronyms, and, then, terms.

	Gigabyte. What is next after kilobyte and megabyte. Roughly, a
G	billion bytes. Actually, 2 to the 30th power, or 1,073,741,824 bytes.
В	
	General Protection, as in GP fault, which is an error that can stop
G	one or more programs from running. Microsoft has previously called
P	these unrecoverable application errors (UAE's).
•	Installable file system. A type of network interface which can be
1	used by the Chicago version of Windows.
F	
S	
	Virtual machine manager. A part of the Chicago version of Windows
V	which manages the virtual machines.

Terms...

0:32	In the Chicago version of Windows, all of the memory addresses can be accessed without dividing
Addressing	the memory into segments (see <i>segment:offset</i>). Therefore, the 0 means the zero segment and the 32
	means the 32-bit address in memory.
	The Chicago version of Windows has a message
Application	queue (which see, below) for each program. Each
Message	thread (which see, below) can also have its own
Queue	message queue. Compare with raw input queue.
	For Base operating system. The operating system
Base OS	software of the Chicago version of Windows.
	See Base OS, above.
Base	

Base System

Kernel

KERNEL

Kernel and

M M

The use of multiple input queues, which see, below.

Input Desynchron ization

The Ring 0 (which see, below) software.

Guaranteed to be confused with KERNEL, which

see, below.

Actually, KERNEL.EXE. A particular file which contains much of the software which runs Windows. Guaranteed to be confused with kernel, which see,

above. Unfortunately for clarity, in the Chicago version of Windows, the KERNEL is not in the

kernel.

Refers to the Two-Ring Model. See *Ring*, below. Kernel Mode refers to Ring 0 and User Mode refers

User Modes to Ring 3.

A thread, which see, below.

Lightweight Process

Load Address Where a program is loaded into random access memory in order to be run. In the Chicago version of Windows, programs are loaded into 4GB (see *GB, above* of virtual memory. (Remember, *virtual* means it appears to be there and may not actually exist.)

A running MS-DOS program has a load address of from 0 to 1MB (megabyte).

Non-running MS-DOS programs have load addresses of from 1MB to 4MB.

Windows programs have load addresses of from 4MB to 1.5GB.

Dynamic-Link Libraries (DLL's) and other shared objects have load addresses of from 1.5GB to 2GB.

Ring 0 (see *Ring*, below) and other operating system software has load addresses of from 2GB to 4GB. A list of messages to be sent to programs. Examples of messages are keystrokes, mouse activities, or input from other software. In the Chicago version of Windows, a part of the software which acts as a single computer to run a single MS-DOS program.

More than one message queue (which see, above). The Chicago version of Windows has multiple message queues. See *raw input queue*, below, and *application message queue*, above.

A characteristic of the Intel 386 central processing unit (CPU) chip which allows the Chicago version of Windows to discourage programs from accessing each other's memory.

In 8088 and 8086 Intel chips, a memory address in a segment. See *segment:offset*. As a simplified example, the address *5:64* means to go to the 64th position (offset) in the 5th segment.

In the Chicago version of Windows, determines which threads (see below) have the highest priorities. Compare with *time slice scheduler*,

below.

In the Chicago version of Windows, each thread (see below) has a priority value. This value determines which threads will be processed at what times. What Microsoft calls a program running in the Chicago version of Windows. Compare with *Task*,

elow.

Starting with the Intel 80286 chip, breaks the 1MB random access memory (RAM) limit. Is called *protected* because it protects programs' memories

from other programs.

Message Queue

MS-DOS Virtual Machine

Multiple Message Queues

Multiple Privilege Levels

Offset

Primary Scheduler

Priority Value

Process

Protected Mode See message queue.

Queue

Raw Input Queue

In the Chicago version of Windows, a message queue (which see, above) which takes raw input from sources such as the keyboard or mouse. Windows then sends this raw input to the appropriate application message queues, which see,

above.

A method of using an 80286 or higher Intel chip that Real Mode

simulates the original 8088 and 8086 chips. It has a 1MB random access memory (RAM) limit. The Chicago version of Windows abandons real mode.

Compare with *protected mode*, above.

A privilege level. See Multiple Privilege Levels, above. In the Chicago version of Windows, Ring 0 is used by the operating system for functions which can access all programs. Ring 3 is used by the programs as well as some additional Windows functions and they cannot violate each others

memories.

In the Chicago version of Windows, software which decides which thread (see below) will be processed at any given time. See primary scheduler, above,

and time slice scheduler, below.

Intel 8088 and 8086 chips are divided into 64K segments. To specify a memory address, the programmer first has to specify the segment of

memory. See segment:offset. below.

A method of specifying memory addresses in 8088 and 8086 Intel chips. The colon (:) separates the segment, which see, above, from the offset, which

see. above.

What Windows 3.1 and earlier versions have. See

message queue, above.

Single MS-

DOS Application Mode

An operating mode for the Chicago version of Windows which provides even more effort at being compatible with all types of DOS programs.

System Virtual Machine In the Chicago version of Windows, a part of the software which acts as a single computer to run all of the Windows programs.

Task

What Microsoft calls a program running in 16-bit Windows. Compare with *Process*, above.

Thread

A single series of computer instructions. Personal computer programs in the past have typically had a single thread of instructions. However, newer programs will have the ability to have more than one thread, which means they will have the appearance of being able to do more than one thing at a time. Specifically, software which determines a memory address. Generally, to some people, the past tense of think and a prethought method of determining

Thunk

Ring

Segment

Scheduler

Segment:Of fset

Single Message Queue

Tiling

Time Slice Scheduler

Two-Ring Model

User Mode

Virtual 8086 Mode addresses. In the Chicago version of Windows, a method of translating between segment:offset (which see, above) and 0:32 addresses (which see, above). An overlapping method (as in roof tiles) of memory addressing used to translate between segment:offset (which see, above) and 0:32 addressing (which see, above).

In the Chicago version of Windows, if the primary scheduler (see above) determines that more than one thread (see above) has equal high priority, then the time slice scheduler will divide the processing time equally between the high priority threads. See *Ring*, above.

See Kernel and User Modes.

Starting with the Intel 80386 chip, this is a mode that simulates more than one 8086 chip at a time, allowing more than one DOS program to be run at a time. This mode can be used by the Chicago version of Windows to run DOS programs from Windows. Compare with real mode and protected mode, above.

Networking Here and There, December, 1993

Terms...

A program which does routine electronic mail chores Daemon

in place of a human, such as returning undeliverable

e-mail (electronic mail) to the sender. Other

spellings are possible.

Signing on to various BBS's (bulletin board systems) and computer networks and exchanging mail.

Networking

Online Access, v8, n8

Acronym...
There Ain't No Such Thing As A Free Lunch.

TANSTAAFL

Terms...

System operator law. The title of a book.

SysLaw System operator.

Sysop

PC Magazine, v12, n20

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Multi-layer actuator head. A particular kind of ink jet printer head used by Epson.

Α С Н

M

Object-Windows Library. A Borland C++ product.

0 W L

Tiny Editor. The name of a particular text editor.

Т Ε D

W

World of Music, Arts, and Dance. A festival which features high

technology.

0 Μ Α D

Kludge

Terms...

Software which is being sold incomplete. A coupon Coupon

is included for the rest of the package when it

becomes available.

One or more computer chips which are embedded

Embedded into an appliance, as opposed to being inside a

computer cabinet. System

The amount of desk space (or floor space) an item

takes up. Footprint

The proposed governmental system using the

Key Escrow Clipper Chip for encryption. The key to breaking the

encryptions would be held in escrow by two

government agencies.

Also, kluge. The computer equivalent of fixing

everything with chewing gum.

The 80-bit algorithm used by the Clipper Chip, the

government's proposed encryption scheme which it SkipJack

can monitor.

PC Magazine, v12, n21

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acro	nyms Complementary Metal Oxide Semiconductor. A chip which uses
С	small amounts of electricity. It is used typically on battery-powered
M	computers and to save configuration information on other computers
0	when they are turned off.
S	Developed Contains 4. The manus of a series of IDM necessary
Р	Personal System 1. The name of a series of IBM personal computers.
S	computers.
1	
1	
	Quatro Pro. The name of a particular spreadsheet program.
Q P	
r	The Sierra Network. A network expecially for games. Now
Т	renamed The ImagiNation Network.
S	· ·
N	

Terms

<u>rerms</u>	
0xFEFF	A special Unicode character known as the <i>Byte</i> Order Mark, which see below. The 0x means that it is in hexadecimal notation and the FEFF is the
	character number. In decimal notation, it is the character 65,279.
0xFFFE	A special Unicode character known as the Reverse Byte Order Mark. See Byte Order Mark, below.
	The <i>0x</i> means that it is in hexadecimal notation and the <i>FFFE</i> is the character number. In decimal notation, it is the character 65,534.
	What 24 bits per pixel will get you. Two to the
16.7 Million	power of 24 is 16,777,216, which is the largest
Colors	number of items (in this case, colors) that 24 bits can
Colors	represent.
	Video display monitors which use 24 bits per pixel to
24-Bit Color	store color. This means that each pixel can be one of (24 to the power of 2 equals) 16,777,216 colors, also called 16.7 million colors.
	The name of a particular Intel 486 chip.
486DX2/66	The hame of a particular litter 400 only.
400D/(2/00	An IBM chip which is a competitor of Intel's 486 chip.
486SLC2	741 IDM only Whom to a competitor of interes 400 only.
-1000E02	The name of a particular type of video accelerator
Appian	chip.
AGC 98032	onp.
7.00 00002	The name of a particular chipset for PDA's (Personal
Astro	Digital Assistants). IBM.

Big Blue

Byte Order

Mark

A Unicode character (a two-byte character) placed at the beginning of a file which indicates whether bytes should be read in order (Motorola style) or in reverse order (Intel style, which switches every two bytes). A single byte is represented by two hexadecimal numbers. The Byte Order Mark is the hexadecimal number FEFF. If the first character of a file is FEFF, then the remainder of the file is in order (Motorola style). If the first character is FFFE (the *FE* and *FF* are switched), then the remainder of the file is in reverse order (Intel style). *FFFE*, also a Unicode character, is called the Reverse Byte Order Mark. A set of chips that work together.

Chipset

Convergenc

е

Draco

_

Dragon

Elan

Hermes

Hobbit

Hook

The

ImagiNation Network

Matrox MGA

Polar

R4400

Reverse Byte Order Mark

SLC2

True Color

VBRUN300. DLL The combining of TV, phone, computer, and networking activities into the "information

superhighway."

The name of a particular chipset for PDA's (Personal

Digital Assistants).

The name of a particular chipset for PDA's (Personal

Digital Assistants).

The name of a particular chipset for PDA's (Personal

Digital Assistants).

The code name for network management software

under development by Microsoft.

The name of a particular chipset for PDA's (Personal

Digital Assistants).

Program code designed to run subroutines that do not necessarily exist, yet. For example, a program could be written with code that says, in effect, "if Subroutine A exists, run it." One or more *Subroutine A*'s could be written later to customize the program at that time.

A network especially for games. Formerly The

Sierra Network (TSN).

The name of a particular type of video accelerator

chip.

The name of a particular chipset for PDA's (Personal

Digital Assistants).

A RISC (reduced instruction set chip) by MIPS

intended to run Windows NT. See Byte Order Mark, above.

IBM's 486SLC2 chip.

Video display monitors which use 24 bits per pixel,

which allows 16,777,216 possible colors per pixel.

For *Visual Basic RUN*. The name of a file of subroutines needed in order for many Visual Basic

programs to run.

The name of a particular type of video accelerator chip.

Weitek P9000

PC Magazine, v12, n22

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

	Acronyms
	Card Services/Socket Services, a specification for PC Cards, which
С	see, below.
S	
/	
S	
S	Evahangaahla Card Arabitaatura Intal angaifigationa far DC Carda
E	Exchangeable Card Architecture. Intel specifications for PC Cards, which see, below.
X	Willon See, Delow.
Ĉ	
Ä	
	Gigahertz. A billion cycles per second. See Hz.
G	
Н	
Z	
_	Global Positioning Satellite network. The network of satellites which
G	can be used to determine one's location on the ground. A receiver
P	can now be obtained which is attached to a PC Card, which see,
S	below, and plugged into a notebook computer. Institute of Electrical and Electronics Engineers.
I	institute of Electrical and Electronics Engineers.
E E E	
Ē	
	Industrial, Scientific, Medical. The 902MHz to 928 MHz band in the
1	electromagnetic spectrum which is used by some wireless LAN's
S	(local area networks).
M	
	Japan Electronic Industry Development Association.
J	
E I	
D	
A	
, ,	Multiple inheritance. A reference to objects taking on characteristics
M	of more than one other object.
I	•
	Tele-Communications Inc. The huge cable network sold to Bell
T	Atlantic.
C	
I	Liniversal Community Contains A Navall aufturant library
11	Universal Component System. A Novell software library.
U C	
S	
_	Execution in place. The execution of a program from where it is
Χ	stored, for example, on a PC Card, which see, below (as opposed to

Names...

Chief Executive Officer of Intel.

Andrew S. Grove

Coinventor of the integrated circuit (IC).

Jack St. Clair Kilby

Cofounder of Intel.

Coinventor of the integrated circuit (IC).

Robert N. Noyce Cofounder of Intel.

Terms...

See Digital Alpha AXP DECchip 21066, below.

21066 See Weitek Power 9000.

9000

See Digital Alpha AXP DECchip 21066, below.

Alpha AXP DECchip 21066

Programming tools from Novell which work on a

AppWare variety of operating systems.

See Digital Alpha AXP DECchip 21066, below.

AXP

DECchip 21066

A device which does biosignal processing, which

BioMuse see, below.

A method of controlling computers by getting neural

Biosignal signals with electrodes.

Processing

A catalog on a CD-ROM which actually contains the CD-ROM software, which is crippled. To get a full working Catalog copy, you call an 800 number and pay for the

program, for which you get a code which unlocks the

full program on the CD.

A notebook computer by Compaq which can use a pen as an input device. A keyboard can also be

used or removed.

Refers to the PC Card, which see, below.

Credit Card-Sized

Concerto

Peripheral

See Digital Alpha AXP DECchip 21066, below.

DECchip

21066

An ink jet printer by Hewlitt-Packard.

DeskJet

A 64-bit central processing unit (CPU) reduced

Digital instruction set chip (RISC) which competes with the Alpha AXP Pentium, which see, below, and runs Windows NT.

DECchip 21066

Electromyo

Biosignal processing (which see, above) of muscle

movements.

gram

Biosignal processing (which see, above) of eye

movements.

Electroocul ogram

Tracking.

A characteristic of a component, such as a PC Card,

which see, below, which can run on different types of Host

computers (hosts). Independen

ce

The ability to switch a component, such as a PC Card, which see, below, while the computer is Hot

Swapping runnina.

See Pentium, below.

Intel

Pentium

An input device on the Z-Lite, which see, below.

LitePoint

Trackball

A subnotebook computer by Hewlitt-Packard.

OmniBook

Pen-Centric

Pen Tablet

Pentium

Platform

Book

A book stored in electronic format. Compare with a **Paperless**

hypertext book which can **only** be stored in

electronic format.

A memory device the size of a credit card. It is PC Card

based on PCMCIA (Personal Computer Memory Card International Association) technology. One can also be used as a connection to a peripheral

component, such as a modem.

Designed with a pen intended as the primary input

device.

A computer which looks like a tablet and uses a pen

as an input device.

The Intel central processing unit (CPU) chip that

upgrades the 486. Thus, it is sometimes informally

called the 586.

A software development system. For example,

DOS, Windows, or Unix. If one develops software for a particular platform, then that software should run on any computer which runs that platform.

A graphics accelerator chip.

Power 9000

Power 9100

A graphics accelerator chip by Weitek which

upgrades the Power 9000.

The name of an IBM notebook computer.

ThinkPad

TrackPoint

A pointing input device used on the ThinkPad, which

see. above.

According to PC Magazine, a new idea (see CD-ROM Catalog, above). Actually, an old idea used by

the Shareware industry for several years, except most Shareware programs are not crippled.

A graphics accelerator chip.

Trv Before You Buy

Weitek Power 9000

Z-Lite

A notebook computer by Zenith.

St. Louis Post-Dispatch, December, 1993

Items are listed, below.

Terms...

A word processor for kids by Microsoft, announced

Creative December 7, 1993. Writer

An art and drawing program for kids by Microsoft,

Fine Artist announced December 7, 1993.

A character in Creative Writer and Fine Artist, which

McZee see, above, who helps the user.

A series of programs for home use by Microsoft.

Microsoft Home

icrosoft

A product which often consists of a CD-ROM
Multimedia (compact disk-read only memory) drive, a sound
Kit board (meaning, circuit board) two inexpensive

board (meaning, circuit board) two inexpensive speakers to set by your computer, and some sample

disks.

The name of a particular sound board which is the

current standard in the industry.

Sound Blaster

Windows Sources, v1, n11

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Bit Block Transfer. To move a rectangular area of bits to another В location. The bits can be changed according to certain rules during the process. Often used to move graphics on a video display, as in i moving pieces, players, or missiles in games. t В Ι t Cyan, magenta, yellow, black. The colors used by printers. They С can be mixed to produce all of the other colors. M Υ Κ Cathode Ray Tube. A video display. С R Т Do Anything Very Easily. A help system in Q&A, the name of a D database program. Α ٧ Ε DataEase Query Language. DataEase is the name of a database D program. Q Electronics Industry Association/Telecommunications Industry Association. The EIA/TIA has worked out a standard for fax Ε modems. Α Т Α Expanded memory specification. Compare with XMS. Ε M S Integrated Database Application Programming Interface, a system developed by Borland, Novell, and WordPerfect to compete with D Microsoft's ODBC (Open Database Connectivity). Α Ρ Last Known Good. How something was set up the last time it worked right. K G Megabyte. Roughly, a million bytes. Actually, 1,024 kilobytes, or Μ 1,048,576 bytes.

486DLC3 It runs at a fast 99MHz (Megahertz) clock speed.

Zero megahertz. A processor that stops to save

0 MHz power when it has not been used for awhile.

A 386 with a sleep mode, to save electricity when it

has not been used for awhile.

Refers to the DOS filename limits of eight characters for a filename plus three characters for an extension, Character

like this: FILENAME.EXT.

IBM's 486DLC3 microprocessor that runs at a fast

99MHz clock speed.

Lightening

For CPU's, running at three times the intended rate or three times the rate of other components. Clock-

Tripled

386SL

8.3-

Blue

An energy-saving or otherwise environment-friendly Green computer.

Machine

Keep it small, simple, and separate. See KISS, **KISS** below.

Cubed

An early portable computer the size of a suitcase

and weighing 20 pounds. Luggable

A common type of rechargeable battery.

Nickel Cadmium

A type of rechargeable battery which is better for the Nickel Metal environment than a nickel cadmium battery.

Hydride

A portable computer the size of a notebook and

Notebook weighing 10 pounds.

When a computer shuts down to save power when it

has not been used for awhile. Sleep State

A method of searching a database that goes by the Soundex

sounds of characters.

Sun's RISC (Reduced Instruction Set Chip). RISC chips compete with standard PC chips and are **SPARC**

generally used on workstations, which are higherpowered computers used by scientists and

engineers.

A portable computer smaller than a notebook and

weighing five pounds.

Subnoteboo

Wired, v1, n6

0

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

Acronyms... Association for Computing Machinery. An organization for computer Α professionals. С Μ Artificial Intelligence/Massive Parallel Processing. A program Α proposed to use financial databases to find criminal activity. M Ρ Ρ America Online. A popular BBS (Bulletin Board System). Α 0 Currency and Banking Database. An IRS database used to fight С crime. В D В Charge-coupled device. A light-sensitive chip. С С D Consortium for International Earth Science Information Network. С Ε S Ν Currency Transaction Report. A report of a financial transaction of С more than \$10,000. Kept in the CBDB, which see. Т R Distributive Active Archive Center. Part of EOSDIS, which see. D Α Α С Deposit Tracking System. A proposed system to provide the D government access to bank accounts. Τ S Earth-orbiting Satelite. Nineteen of them will be put into orbit over 15 years to return computerized information. Ε

Names...

Μ

Attorney General. Made FOIA (Freedom of Janet Reno Information Act) access somewhat easier.

Developer of PGP (Pretty Good Privacy), an

Phil encryption program in apparent competition with the

Zimmerman Clipper chip encryption device, which the

government can monitor, being pushed by the NSA

(National Security Agency).

Terms...

E-mail (electronic mail) which is returned because of

Barf Mail a bad address.

A suicide attack on a base in Netrek, which see.

Base Ogg

A complete change.

Bit Flip

Short for cyborg.

Borg

Government money for computer projects.

Cyberpork

Something that is not supposed to become outdated

soon.

Futureproof

LifeCHIP

A tiny chip implanted in pets which can be accessed

to identify them if they become lost.

A suicide attack in Netrek, which see.

Ogg

Food.

Karbon

A billionth of a meter.

Nanometer

Microscopic technology.

Nanotechno

logy

Someone experienced at getting around in a

Netsurfer network, particularly Internet.

Another word for Cyberpunk.

Neuromanti

С

A game on Internet like Spacewar which many

Netrek people can play at the same time.

Someone overly concerned with acronyms (like the

author of SunShine).

Ten quadrillion bytes (10 to the 16th power).

Petabyte

Nym-rod

Sliding rods used in a theoretical nanotechnological

Rod logic computer.

Cyberjargon.

Techno-

Patois

Another word for Cyberpunk.

Tekkie

A million megabytes (10 to the 12th power).

Terabyte

WordPerfect Report, v7, n4

Terms...

A type of help system.

Coach

To start a program.

Launch

Boardwatch, v7, n12

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acror	nyms

Enhanced Serial Port.	A <u>serial port</u> by Hayes which helps their
extremely fast modems	<u>.</u>

Ε S Р

> International MBBS Association. A group of people interested in MBBS, which see, below.

M В В S Α

Integrated Services Digital Network. A 1979 proposal, becoming moot, concerning data transfer using telephone lines.

S D Ν

The Major BBS. The name of a particular brand of BBS software.

M В В S

Terms...

	A somewhat universal login name to access <u>Internet</u>
Anonymous	sites.

What some people call the ISDN, which see, above.

Compare with information superhighway.

Data Highway

A lawsuit. Epitome claims that Kipke committed Epitope, fraud by making statements on Prodigy that caused

Inc. v. A its stock prices to fall and that Kepke benefitted by Karl Kipke the change in prices.

A program that retrieves files on the Internet. See

FTPMAIL FTP.

A particular modem which uses V.FC (which see,

below) technology.

Hayes Optima 288

V.FC + Fax

Medphone

A lawsuit. Medphone claims Denigris made libelous statements against it on Prodigy which made its stock prices fall.

Corporation

vs. Peter Denigris

See Hayes Optima 288 V.FC + Fax, above.

Optima 288 V.FC + Fax

System administrator.

Sysadmin

UUENCOD

A device used to connect <u>asynchronous</u> ports with Terminal

TCP/IP. What this really means is to connect

personal computers to the <u>Internet</u>. Server

Unix to Unix decode. To take a non-text file which **UUDECOD** has been changed to text with UUENCODED, which Ε

see, below, and change it back into its original non-

text format.

Unix to Unix encoded. This means to encode a non-text file into a coded text file so that it can be

transferred using electronic mail (e-mail). Compare

with UUDECODE, which see, above.

A proposed standard for 28,800bps modems.

V.34

ED

An extremely fast technique used by Motorola of

transferring data over modems in excess of V.Fast

20,000bps.

For V.Fast Class (see V.Fast, above). A Rockwell

V.FC standard for 28,800bps modems.

Boardwatch, v8, n1

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Trunk 1. A heavier duty telephone line.

T 1

Wildcat! Unix to Unix Copy Program. Wildcat! is the name of a BBS program.

w c U

U C P

For Wildcat! Unix to Unix Copy Program. Wildcat! is the name of a BBS program.

IL D U

W

UUCP

World Wide Web, which see, below.

W 3

World Wide Web. A hypertext system set up on the Internet.

W W W

Terms...

An ethernet connection that uses UTP (unshielded

10BASE-T twisted-pair) wiring.

A program which accesses the Internet from

Chameleon Windows.

A DOS program to perform UUCICO, which see,

FX above.

UUCICO

An Internet hypertext encyclopedia project.

Interpedia

A GUI (Graphical User Interface) for accessing the Mosaic hypertext WWW (World Wide Web) on the Internet.

A program which uses Winsock, which see, below.

Trumpet

A DOS program to perform UUCICO, which see,

Waffle above.

A Windows subroutine library that provides access to

Winsock the Internet <u>TCP/IP.</u>

The actual file containing Winsock, which see,

WINSOCK.

DLL

above.

Byte, v19, n1

Items are listed alphabetically, below.

Terms...

DOS has so far been a 16-bit operating system. 32-Bit DOS Byte suggests that the version of DOS to be

distributed with Chicago will be a 32-bit version.

An IBM version of UNIX.

AIX

An AMD (Advanced Micro Devices) chip which AM386sc

combines the central processing unit with support chips, runs DOS and Windows, and is intended for

use with hand-held computers.

Broadcast node.

B-Node

Swapping

This is best shown by example. A single byte is Byte

represented by two hexadecimal numbers, in this case 12. Many integers are represented by two bytes. Suppose that one of the bytes is 12 and the other is 34. To us humans, it would seem common

sense that the integer would, therefore, be

represented as 1234. This is in fact how Motorola chips do it. However, Intel chips reverse the bytes and store the integer as 3412. Switching between

the two methods is called byte swapping.

Data which goes through a pipeline and does not take full advantage of the processing power of the

pipeline. See pipeline, below.

Compact disk, write-once.

CD-WO

Bubble

In the PowerPC, one of three power-saving modes. Doze

Doze saves the least amount of power, nap is in the

middle, and sleep saves the most power.

See pipeline hazard, below.

Hazard

ISO

A technical standard for CD-ROM's (compact disk,

read-only memory). Also called ISO 9660.

9660:88

Mixed node.

M-Node

According to Byte magazine, a "small privileged Microkernel

core" of an operating system that allows "modularity and flexibility." This could be what Microsoft refers to as Ring 0 software. For detailed information, start with the word *kernel* in <u>Microsoft Systems</u>

Journal, v9, n1. See Doze, above.

Nap

Pipe

Point-to-point node.

P-Node

A series of processing steps in a chip which results

in more than one instruction being processed at a

time. A pipeline, see below, can consist of one or

more pipes.

One or more series of processing steps in a chip Pipeline which, when used together, allow more than one

instruction to be processed at a time. Each series is

called a pipe, which see, above.

Situations which slow down the processing of data in Pipeline a pipeline. See pipeline, above. An example of a Pipeline hazard is a WAR (write-after-read) to the

same memory. Suppose that the read goes through the X-Pipe and the write goes through the Y-Pipe (see X-Pipe and Y-Pipe, below). The read is supposed to obtain pre-existing data before the write overwrites it. However, if the write occurs first, the pre-existing data will be overwritten and lost, thus

creating an error. That's a pipeline hazard. The processor must overcome this hazard by assuring that the the read occurs before the write. Other

types of hazards also exist.

See Doze, above.

Sleep
A standardization of 1,170 API (application)

programming interface) functions for Unix.

An organization which sets standards for **Unix**. See

Spec 1170, above.

One of the two pipes in the Cyrix M1 chip. See

pipe, above.

One of the two pipes in the Cyrix M1 chip. See

Y-Pipe pipe, above.

Spec 1170

X/Open

X-Pipe

Items are listed alphabetically, below.

The C Users Journal, v12, n1

Terms...

1/10 Second Rule

Big-Endian

Freely Distributabl e Software

Little-Endian

Semaphore

A suggested maximum time limit for an application to process a Windows message.

A reference to the byte order used by a chip. The opposite of little-endian. Consider two bytes, 1 and 2. If you read them on a page, they are in the order 1-2. The big number (2) is at the end. That order is big-endian and is the order used by Motorola chips and Macintosh computers. Intel chips and IBM compatibles process the same two bytes in the order 2-1. The little number (1) is at the end and this order is little-endian. Switching between big-endian and little-endian, which must be done for communication between Macintosh's and IBM's, is called byte swapping. What if there are more than two bytes? Big-endian would be 1-2-3-4-5-6. Little-endian would be 2-1-4-3-6-5. Freeware. Software which is copyrighted, but free.

See Big-endian, above.

A method of coordinating the timing of programming threads. As an example, consider a primary thread and a secondary thread. The secondary thread is not supposed to continue past a certain point unless the primary thread is finished. The semaphore starts at 0. If the primary thread is finished, first, it sets the semaphore to 1. When the the secondary thread is ready, it checks the semaphore. If it is 1, then the secondary thread may proceed. However, if it is 0, then the primary thread is not finished yet. In which case, the secondary thread marks a waiting queue. Then, when the primary thread is finished, the mark is found and the secondary thread is activated to continue. More complicated setups are possible.

Online Access, v9, n1

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

Acronyms...

Consultative Committee International on Telephones and Telegraphy.

Used to set standards for modems. Replaced by the ITU.

C C I

I T T

Electronic Dissemination of Opinions System. Refers to court

E decisions.

D

O S

Link Access Procedure for Modems. An error correction standard

that has been incorporated into V.42, which see, below.

A P M

L

Names...

President of America Online.

Case, Steve

President of Prodigy.

Glatzer, Ross

Director of Computer Services at Delphi.

Laliberte, Steve

Terms...

A magazine in electronic format (as opposed to

E-Zine being printed on paper).

The ITU standard for a 9,600bps modem.

V.32

The ITU standard for a 14,400bps modem.

V.32bis

Not actually a standard. It refers to modem speeds

V.32 terbo of 16,800<u>bps</u> or 19,200bps.

A standard for modem error corrections.

V.42

See V.32 terbo, above.

V.Terbo

PC Magazine, v13, n1

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Personal Interactive Electronics. As in Apple PIE.

Ρ F

\intbl SESSmart Energy System. In some IBM computers, hardware and software which cuts back on energy when not in use.

Terms...

The brand name of a color laser printer by QMS.

ColorScript

Laser 1000

A semiconductor, better than silicon, but difficult to process on Earth. May be processed in the future Gallium

Arsenide in space.

A mode where the power is cut back to save energy

Hibernation when a computer is not in use.

The brand name of a Hewlitt-Packard flat color

HP ScanJet scanner.

llcx

Iostream

Input/output stream. This refers to a stream of data

going to and from a disk or some other location.

The code name for an AMD chip intended to be a

K5 competitor of the Pentium chip.

The code name for a Cyrix chip intended to be a

competitor of the Pentium chip. M1

A new variation of the Intel Pentium chip which is in

P54C the works.

The brand name of a color laser printer by QMS.

QMS

ColorScript

Laser 1000

A RISC by Toshiba and AT&T intended to compete

with the Pentium. R4600

The brand name of a Hewlitt-Packard flat color

ScanJet IIcx

A PCMCIA hard disk by SyQuest Technology.

SQ1080

stdio

Standard input/output. This refers to a collection of

input and output subroutines and their associated

data types.

Able to process more than one machine language

instruction per clock cycle. Superscalar

Items are listed alphabetically, below.

PC Magazine, v13, n2

Terms...

An IBM chip also called Blue Lightening.

486SLC3

A symbol of the Environmental Protection Agency

Energy Star that indicates a computer meets certain energy

saving requirements.

A proposed Apple circuit board that will run

Houdini Macintosh, DOS, and Windows programs.

A hardware device that connects computers in a network. A computer sends data to the hub, which

retransmits the data to all of the other computers. A programming language by Borland intended to

compete with Microsoft's Visual Basic for

Object compete with Micros Automator Applications (VBA).

A future Intel Pentium chip.

P-6

Hub

A future Intel Pentium chip.

P-7

See *hub*, above. Hubs which can be connected together to handle more computers on a network.

Hubs

Windows Magazine, v5, n1

Items are listed alphabetically, below.

Note: Several references are made below to Chicago and icons.

Terms...

3-D Menu Bar

dimensional.

CoolSwitchi

ng

A method of switching between active but cold (not on top) programs in Windows. It is done with an

In Chicago, a menu bar which appears to be three

extended simple bucky. Press the kev and

ТАВ 塩

hold it down while pressing the key over and over. Each active will be displayed in succession. When both keys are let up, the displayed program will be selected. To cancel and return to the last

ALT program, while still holding down the key,

ESC press the key and let up on both of them. In Chicago, an icon that looks like a file folder which can represent one or more files or which can contain

additional folders.

In Chicago, a smaller than normal icon in the title

Miniature

Icon

Panel

Folder

In Chicago, a rectangle which represents a program

which has been minimized.

In Chicago, the icon for a folder which holds other

folders.

In Chicago, a button which is placed where it is more

handy.

Button

Recycle Bin

Shredder

Sizer

Parent Icon

Quick Push

In Chicago, the icon for a trash can. A place to discard files. Compare with Shredder, below.

An icon in OS/2 used to discard files. Compare

with Recycle Bin, above.

In Chicago, an area in the lower right hand corner of

a window which can be used to resize it.

A line of status information which is often located

along the bottom of a window. Status Bar

Windows Sources, v2, n1

Items are listed alphabetically, below.

Terms...

An <u>ITU-TSS</u> standard for video Compression. Also

called Px64.

An ITU-TSS standard for videoconferencing.

H.320

Plug and

H.261

To be able to plug in a new peripheral and have it work without a difficult installation process.

Play

See H.261, above.

Px64

The version number for Windows for Workgroups

(WFW).

Windows 3.11

Windows Sources, v2, n2

Items are listed alphabetically, below.

Terms...

The server, which see, below.

Back-End

A computer on a network which gives a user access

Client to a database located on another computer. See

Client/Server, below

A network of computers where one, the server, contains a database which it makes accessible

Client/Serve contains a database which it makes accessible

(serves) to the clients, which are the other

computers.

To go from a mainframe to a client/server system.

Downsize See *client/server*, above.

The clients, which see, above.

Front-End

Literally nothing, not even zero or a space. For Null example, in the IBM personal computer character

set, the character 0 is number 48, the space character is number 32, and the null character is number 255. However, some programs fudge (or allow the user to fudge) and assign zero to a null

value.

See *Thunk*, below. To translate code results from 32-bit Windows code back to 16-bit Windows code.

Reverse-Thunk

Thunk

A computer on a network which contains a database

Server which it makes accessible to the other computers.

See *Client/Server*, above. Sometimes called the closet computer, because servers are sometimes

kept in closets.

Specifically, to determine a memory address. Used

in this magazine to mean to translate from 16-bit

Windows code to 32-bit Windows code.

Wired, v2, n1

Items are listed alphabetically, below, first names, and, then, terms.

Names...

Cofounder (with Bill Gates) of Microsoft is buying heavily into America Online.

Allen, Paul heavily into America Online.

"The World's First Programmer" because of her work

Lovelace, with Charles Babbage on the Analytical Engine.

Ada The Ada programming language is named after her.

Terms...

Magazines about computers.

Cyberzines

From Microsoft and serf. An employee of Microsoft.

Microserf

Someone who enjoys the **Internet**.

Net-Head

Not electronic mail.

Snail Mail

Boardwatch, v8, n3, 3-94

Items are listed alphabetically, below.

Terms...

Computer sex or cybersex.

C-Sex

Domain

Gopher

A particular part of an Internet address. In the address 73770.615@compuserve.com the domain is

compuserve.com. In general, it identifies a network

or site.

The mascot at the University of Minnesota where the

Internet Gopher software was developed. Also the

pun, "go for."

A program which briefly accesses Internet sites to

Ping verify that they are operational.

See domain, above and suffix, below. The part of a

Subdomain domain which is between the @ symbol and the

suffix. For example, in the address

73770.615@compuserve.com the subdomain is *compuserve*. Subdomains can have multiple parts,

for example, the address

hername@site.network.edu has two subdomains

which are site and network.

The ending part of a domain, which see, above. In the address 73770.615@compuserve.com, the suffix

is *com.* Common suffixes are com (commercial), edu (educational), gov (government), and net (network). Internationally, the suffix is a two-character code which identifies the country.

Suffix

Computer underground Digest, 619-626, 2-27-94 to 3-20-94

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Digital Telephony. A proposed technology which would allow telephone wiretapping from remoted sites, such as police offices.

Escrowed Encryption Standard. Refers to the Clipper Chip.

Ε Ε S

D

Т

Telephone security device. An example is the Clipper Chip.

Т S D

Terms...

See AT&T 3600 Telephone Security Device, below.

3600 Telephone Security Device

A phone with encryption technology installed. This

one does not provide government access.

AT&T 3600 Telephone Security Device

Back Door

A secret way around a password, usually written as

code by a programmer.

The designation of the Clipper Chip.

MYK-78

The designation of the Clipper Chip.

Mykotronx MYK-78

From pseudonym and anonymity. In a virtual reality, Pseudonym where a character develops a personality, so that ity

she is not really anonymous, but the other players still don't necessarily know who her real human

activator is.

See AT&T 3600 Telephone Security Device, above.

Telephone Security Device

From turn someone into a toad. To toad someone Toad

is to eliminate their character in a virtual reality. It is

the equivalent of virtual reality death and is performed by a wizard, which see, below. Someone in a virutal reality who has access to

Wizard commands that common users don't. Therefore, a

wizard can do things that other people can't do.

Microsoft Developer Network News, v3, n2, 3-94

Items are listed alphabetically, below.

Terms...

A file which contains other files.

Compound

File

Already applied to dress and music, now work. ...to

Grunge dish off most of the detailed grunge work...

A utility which examines Windows 3.1 C code and

makes recommendations for Chicago and Windows PortTool

NT code.

A double-byte character set used in Japan. JIS stands for Japan Industry Standard.

The next release of Windows NT.

Windows

Shift-JIS

NT 3.5

Networking Here and There, 2-94

Terms...

The government's new name for the Clipper Chip.

Key Escrow Encryption

PC Police

Supervisors in an organization who check hard disks for unauthorized programs.

PC/Computing, v7, n3, 3-94

Items are listed alphabetically, below.

Terms...

A PIC (programmable interrupt controller) chip.

8259

A list of everything attached to the bus.

Bus

Enumerator

A process in the Chicago version of Windows that

Configuratio

manages Plug and Play features.

n Manager

Hardware

A list of information about the hardware used by a

computer.

Tree

Software in the Plug and Play system that resolves

conflicts.

Resource Arbitrator

PC Magazine, v13, n5, 3-15-94

Items are listed alphabetically, below.

Terms...

A network where part of an application is on the

clients and part of it on the servers. Application

Server

Apple's name for the P1294, which see, above.

A modem designed to be connected to a cable TV HomeWork

The code name for a new online service by Ziff-Interchange

A fast (12.5 megabits/second) TI (Texas Instruments)

P1394 serial interface.

A new online service by AT&T.

PersonalLin

FireWire

The order of overlapping windows on a video screen.

Z-Order Comes from the z axis.

PC Magazine, v13, n6, 3-29-94

Items are listed alphabetically, below.

Terms...

Linker

System

A programmer's utility which displays an organized

Class representation of object classes. Browser

A programmer's utility which generates code. An Code example is when the programmer visually creates a dialog box, and, then, a code generation tool writes

Tool the actual code to produce it.

A single chip which replaces two or more chips.

Combo Chip

Software used by a programmer to debug a program. Typically, a debugger will perform one

code instruction at a time and stop, allowing the programmer to see exactly what happens when each

step of the program is executed.

A clock-tripled 486.

DX4 Software used by a programmer to link the different

parts of a program together.

A credit-card-sized item that contains a chip which

Smart Card can store information.

A programmer's utility that allows certain coding

Spy functions to be monitored.

A collection of subroutines which are typically sold to

Toolset programmers to use in their own programs.

The video screen dialog box that goes with a MAW

Windows (Microsoft at Work) printer.

Printing (Microsoft at Work) printe

Reuters News Service

Items are listed alphabetically, below, first names, and, then, terms.

Names...

President of Teledesic, which see, below.

Russell Daggatt

Of Microsoft, one of the two major investors in

William Teledesic, which see, below. The other is Craig

Gates McCaw.

Of McCaw Cellular Communications, one of the two

Craig major investors in Teledesic, which see, below. The

McCaw other is William Gates.

Terms...

A high-capacity satellite dish.

Gigalink

Iridium

A proposal by Motorola for complete satellite Earth

coverage.

A company with a \$9 billion plan to cover the entire

Teledesic Earth with 840 satellites in low (435-mile) orbits.

Corporation

Scientific American, v270, n3, 3-94

Items are listed alphabetically, below.

Terms...

Refers to hertz. The tone that could be made with 2600 the whistle in the Captain Crunch cereal box that

John Draper used in 1971 to access long distance

phone lines.

A password system that asks a question which must

be answered. This way, just having the password is Challenge-

Response not enough to access the system.

Password

Gate

P-Type

The process of adding impurities to a computer chip

in order to control the later action of electrical Doping

currents in the chip.

Two computers between an internet and a network. Fire Wall

One filters incoming data and the other outgoing

data in order to reduce the possibility of unauthorized access to the network.

An electronic circuit which determines whether another circuit has current or not. The second

current represents a bit, which is either on or off.

depending upon the status of its current.

A simple substitution code where A=1, B=2, C=3,

and so forth, up to Z=26. Gematria

A type of semiconductor which can be used in

computer chips. Silicon is more common. Germanium

For *negative type*. Semiconductor material which is

primarily negative. N-Type

A password from a list. After one password is used, the next one on the list is used next. The method is

One-Time Password intended to reduce the possibility of someone

stealing a password and getting access to a system.

For positive type. Semiconductor material which is

primarily positive.

Material which sometimes conducts electricity and

sometimes does not. In a computer chip, whether Semicondu electricity is conducted depends upon the electrical ctor

fields of nearby circuits, called gates.

A semiconductor material commonly used in

Silicon computer chips.

For transfer resistor. An device which can amplify,

Transistor oscillate, or switch electrical currents. In computers,

tiny transistor switches in chips are used to

represent the on and off status of bits.

Wired, v2, n4, 4-94

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

Acronyms...

American on hold. A play on words for AOL (America Online).

Α 0

Н

Terms of Service. Rules of conduct for Amercia Online. Also,

Т TOSsed out.

0 S

Names...

Prosecutor at Department of Justice who may be involved in investigation of antitrust allegations Anne

against Microsoft. Bingaman

Bill Gates, chairman of Microsoft. Also, an old character on Saturday Night Live made out of clay Mr. Bill

and frequently mutilated. Chief Counsel for Novell.

David

Bradford

Infoworld publisher. Inventor of Ethernet.

Bob Metcalfe

Prosecutor at Department of Justice who may be involved in investigation of antitrust allegations Sam against Microsoft.

"Ziggy"

Miller

Senior Vice President of Law and Corporate Affairs

William for Microsoft.

Neukom

Terms...

Manufacturer using the Clipper Chip.

AT&T

A proposed scheme to stop the alleged situation of secrets going from Microsoft operating system Chinese programmers to Microsoft applications programmers. Wall Someone who monitors a BBS and has authority to

remove a user for bad conduct.

The AT&T logo.

Death Star

Digital

Cybercop

A coalition of companies trying to get the federal embargo on encryption software lifted. It includes IBM, Apple, Sun, Microsoft, and others.

Privacy and Security Working

Group.

National

Institutute of Standards and

Technology

recrinology

Per-Processor

Licensing

Trade Secrets.

Treasury, Dept. of

Tying Scheme

Undocumen ted Call

Designated by the Clinton Administration to hold one

of the two public keys to the Clipper Chip.

A scheme where a dealer must pay a software fee for every computer sold, whether the software is on

every computer or not.

See undocumented calls.

Designated by the Clinton Administration to hold one

of the two public keys to the Clipper Chip.

Putting conditions on sales of software. (Apparently from tying a condition to a situation.) For example, if a dealer wants one program, she also has to buy

another.

Subroutines *(calls)* in operating systems which were allegedly known only to Microsoft, allegedly giving Microsoft applications programmers advantages

over other programmers.

WordPerfect Report, v8, n1, Spring, 1994

Items are listed alphabetically, below, first names, and, then, terms.

Names...

Co-founder (with Bruce Bastian) and former

Alan Ashton president of WordPerfect.

Co-founder (with Alan Ashton) of WordPerfect.

Bruce

Bastian

Pronounced ought. The new president and chief

Ad Rietveld executive officer of WordPerfect.

Terms...

Education and entertainment.

Edutainmen

t

Information and entertainment.

Infotainmen

t

A WordPerfect personal information manager which

InfoCentral was code-named CIA.

A WordPerfect character who sings along with

Kap'n children.

. Karaoke

A WordPerfect character who takes children on

Wallobee geography tours.

Jack

WordPerfect InForms.

WP

InForms

WordPerfect Office.

WP Office

Boardwatch, v8, n2, 2-94

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

Acronyms...

Datamax/Satalink	Connection.	A large BBS in	Pennsylvania.

D S

Č

Harry Fox Agency. Sued CompuServe on November 29, 1993, for allegedly distributing copyrighted music. The issue is related to Η Cubby v. CompuServe, which see, below. Is CompuServe F

Α responsible for monitoring what it distributes?

National Music Publishers Association. Parent organization of HFA,

which see, above.

Ν M Ρ

Α

Synchronous Optical Network. MCI technology used in part of the backbone of the Internet.

0 Ν Ε

Т

S

Names...

Dr. Vinton

Of Internet fame, named senior vice president of data architecture for MCI's Data Services Division.

Cerf

Wed Microsoft head Bill Gates on January 1, 1994.

Melinda French

Terms...

An Apple Computer network.

eWorld

Cubby v. CompuServ

A lawsuit which CompuServe won. The issue was whether CompuServe was responsible for

monitoring everything it distributed and to weed out

libelous material. The answer was "no."

A proposed Microsoft network.

InfoServe

Byte, v19, n3, 3-95

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

European Strategic Program for Research in Information

Technologies.

S P

Ε

R Т

European Telecommunication Standard Institute.

Ε Τ S

Research and Development in Advanced Communication in Europe.

R Α С Ε

Trunk 3. A telephone trunk line.

Τ 3

Terms...

See HR 3626, below.

Antitrust Reform Act of 1993

For balanced/unbalanced. A device which connects Balun

a balanced (two-wire) line, such as a phone line, to an unbalanced (coaxial) line, like cable. The twowire line is called balanced because the currents in each wire are equal and in opposite directions. To write emotional remarks on electronic mail.

Flame

High

The law that created the NREN (National Research

and Education Network).

Performanc

Computing Act of 1991

HR 3626

National Information Infrastructure Act of 1993.

Expands the High Performance Computing Act of HR 1757

1991, which see, above.

Antitrust Reform Act of 1993. Changes what services RBOC's (Regional Bell Operating

Companies) can provide.

National Communications Competition and

HR 3636 Information Infrastructure Act of 1993. Would change the 1934 Communications Act by changing what services telcos (telephone companies) can provide.

See HR 3636, above.

National Communica

tions

Competition

and

Information Infrastructur e Act of 1993

See HR 1757, above.

National Information Infrastructur e Act of 1993

A normal telephone cord.

Silver Satin

Video

A product by Hewlitt-Packard which sends different parts of the same video to different locations at the

Engine same time.

Byte, v19, n2, 2-94

Items are listed alphabetically, below, first acronyms, then names, and, then, terms.

Acronyms...

Run length encoding. A compression technique which substitutes series of identical bytes with an identification of the byte and how many times it is repeated.

Ε

Very long instruction word. Programming code which simultaneously gives instructions to more than one processor.

L I W

Names...

One of the developers of LZ and LZW compression.

Lempel, Abraham

One of the developers of LZW compression.

Welch, Terry

One of the developers of LZ and LZW compression.

Ziv, Jacob

Terms...

The company which produces the Magic Cap Interface, which see, below.

Magic

The problem is that the large CPU's have a tendency to get overheated. The liquid cooling is for these chips.

A layout where the screen looks like actual items.

Magic Cap Interface

One selects an item to start a program. For example, one screen looks like the top of a desk. Selecting an item on the desk starts a program. A method of compression in which new bytes are compared with previous ones. When a match is found, a code is inserted indicating how far back to go and how many characters to repeat. It is called a *dictionary* because the self-referential compressed file refers to its own dictionary of repeated bytes. It

Sliding Dictionary

only goes back a limited number of bytes.
Therefore, the dictionary of repeated bytes slides

is called *sliding* because the search does not necessarily go back to the beginning of the file. It

along the length of the compressed file.

The C Users Journal, v12, n2, 2-94

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Byte Pair Encoding. A compression method where a file is scanned and a count is kept of every pair of bytes. The most frequent byte pair is then replaced throughout the file by an unused byte. Then, a Ρ Ε new count is made and the process is repeated several times (with byte substitutions being eligible for additional substitutions). A table keeps track of what bytes represent which pairs of bytes. This method is noted for taking longer for compression, but for having small and fast decompression programming code. Extended Binary Coded Decimal Interchange Code. An IBM Ε

character coding scheme. Compare with ASCII.

International Symposium on Computer Architecture.

Terms...

	Programming code which searches a file for			
Boyer and	specified characters. Instead of comparing each			
Moore	character in the file with the first character of what			
Algorithm	being looked for, it skips ahead and compares a			
	character with all characters that are being sought			
	If any match is found, it narrows down the search,			

otherwise, it skips ahead, again.

Programming code which keeps track of how many character matches have been made during a search. Instead of doing this on the character level, it does it on the bit level, which is faster. The routine includes shifting bits to the left and using an OR logical

operator, thus the name Shift-OR.

Shift-OR Algorithm

В С D

С

S С Α

Computer underground Digest, 591-618, 12-5-93 to 2-23-94

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Α

AIDS Education and General Information Service.

Ε G S Corporation for Regional and Enterprise Networking. С 0 R Ε Ν Computer Professionals for Social Responsibility. Founded in 1981 С over the issue of using computers in nuclear weapons systems. Is Ρ now concerned with the National Information Infrastructure; Civil S Liberties and Privacy; Computers in the Workplace; Technology R Policy and Human Needs; and, Reliability and Risk of Computer-Based Systems. Computer Viruses, Artificial Life, and Evolution. С ٧ Α L &

Directions and Implication of Advanced Computing.

Terms...

An electronic periodical about computer viruses.

40HEX

Ε

D

A C

The former Crime Bill. See S 1607.

HR 3355

HR 3627

Would ease export controls on encryption software.

Introduced by Rep. Maria Cantwell.

See S 1607, below.

Computer Abuse Amendment s Act of 1993

Electronic mail penpal.

Keypal

The Crime Bill, which includes computer crime. The

Computer Abuse Amendments Act of 1993. The name of a federal government circuit board designed to do encryption. Organic chemistry. S 1607

Wetware

Tessera

PC Magazine, v13, n3, 2-8-94

Items are listed alphabetically, below, first acronymns, and, then, terms.

Acronyms...

Artisoft's LAN Interface Chip for Ethernet. LAN stands for Local

Area Network.

C

Α

E

Ρ

Plug and Play. A Microsoft standard for easily adding peripherals to

a computer.

n P

T 0 0 L S

Technology for Object-Oriented Linking and Sharing.

Terms...

The size of a transistor on a PowerPC chip. See

0.6 Micron <u>micron.</u>

The size of a transistor on a Pentium chip. See

0.8 Micron micron.

Code name for a WordPerfect personal information

CIA manager.

A word processing document that contains one or

Compound more OLE objects (such as graphics or

Document spreadsheets).

A line of home products by WordPerfect.

Main Street

A Pentium chip which runs at 120 MHz.

Pentium

DX2

The name of a service which provides Windows

Pipeline access to the <u>Internet.</u>

A standard software device driver for desktop

Twain scanners.

An update to Windows 3.1 that updates device

Windows drivers and makes counterfeiting the software more

3.11 difficult.

PC Magazine, v13, n4, 2-22-94

Items are listed alphabetically, below.

Terms...

The size of a transistor on proposed PowerPC 603,

0.5 Micron 604, and 620 chips. See micron.

One in which data is lost. Is typically used for

Lossy photographs in which slight changes are not very

compressio noticeable to the human eye.

n scheme

SoftWindow

In Windows NT, a series of connected lines.

Path

Transmitting computer data by copying it to floppy

Sneakernet disks and physically sending or taking the disk

somewhere else.

A product to run Windows programs on the

PowerPC.

s

A programming language specifically for

Telescript communications.

Windows Sources, v2, n3, 3-94

Items are listed alphabetically, below, first acronyms, and, then, terms.

Acronyms...

Common Object Model. Programming code which is similar to both Microsoft's OLE (Object Linking and Embedding) and DEC's (Digital Equipment Corporation's) ObjectBroker.

M

Common Open Systems Environment. Object programming code developed by Sun Microsystems and NeXT.

IBM Continuous Speech Series. The issue is having computers recognize continuous speech, as opposed to individually pronounced words. The ICSS is a software development kit to assist in this.

Look-up table, digital-to-analog converter.

Terms...

A graphics accelerator chip.

ATI

C 0 S E

C S S

U

D A C

88800GX

The main program in an object oriented

Container environment. It *holds* the objects being worked on and allows other programs to also work on these

objects. So far, in all given examples of all noticed

magazines, the container has been a word

processor.

Same as container, which see, above.

Host

Application

An imaginary kid who helps users of Microsoft's

Creative Writer.

A graphics accelerator chip.

Matrox

Maggie

MGA-II

An imaginary kid who helps users of Microsoft's

Creative Writer.

The Weitek P9100, a graphics accelerator chip.

P9100

Max

A graphics accelerator chip.

S3 Vision

864

A feature of Microsoft's Creative Writer which suggests story plots for kids.

Splot Machine

A graphics accelerator chip.

Tseng

W32p

A graphics accelerator chip.

Vision 964

A graphics accelerator chip.

Weitek P9100

Wired, v2, n2, 2-94

Items are listed alphabetically, below.

Acronym	IS American Association of Motor Vehicle Administrators Network.
Α	A network that supplies drivers license information for all 50
Α	states.
M	
V	
A	
N	
E T	
1	Internet Initiative Japan. The company of Jun Murai, which
IIJ	see, below.
	Two Way Information Communication System. See Jun
Ţ	Murai, below.
W	
IC	
S	W(11.14
14/	Widely Interconnected Distributed Environment, a Japanese
W ID	network put together by Jun Murai, which see, below.
E	

Talk the Talk

If you're going to *walk the walk* you have to *talk the talk*, and that means getting it right. If you use the right words, but in the wrong way, that immediately labels you as a beginner.

Have you ever asked a question of an experienced user and gotten a blank stare in return? You probably used a jumble of phrases in the wrong way and he or she is trying to figure out what you really mean.

What follows below are examples of mis-used phrases and what's wrong with them...

5 1	1871 41 14
<u>Phrase</u>	What's wrong with it
16-Bit Path	The word <i>path</i> refers to what subdirectories on a disk to use to access a file. In Windows NT, it also refers to a series of connected lines in a graphic. What <i>16-bit path</i> is supposed to be is <i>16-bit bus</i> . A <i>bus</i> is a parallel series of connections
	between components of a computer. Common bus sizes are 8-bit, 16-bit, 32-bit, and 64-bit. The more connections, the faster information can travel between the components. Don't say 16-bit path. Instead, say 16-bit bus.
	Does this come from kickstarting a motorcycle? Not really.
Boot up a program	The word <i>boot</i> is short for <i>bootstrap</i> and refers to loading the operating system and starting the computer. Just as one laces up boots one hook or eyelet at a time, an operating system is loaded piece by piece, each one building on the other until the task is completed. Thus, <i>booting the computer</i> means to start or restart it. The word <i>boot</i> should not be
Double Spin	used with the word <i>program</i> . This is in reference to compact disks. Currently, there are standard speeds, double speeds, triple speeds, and quadruple speeds. A double-speed CD-ROM (compact disk read-only memory) reads the disk twice as fast as a standard-speed CD-ROM. It still only spins in one plane, so there is no <i>double spin</i> , but there is a <i>double speed</i> .