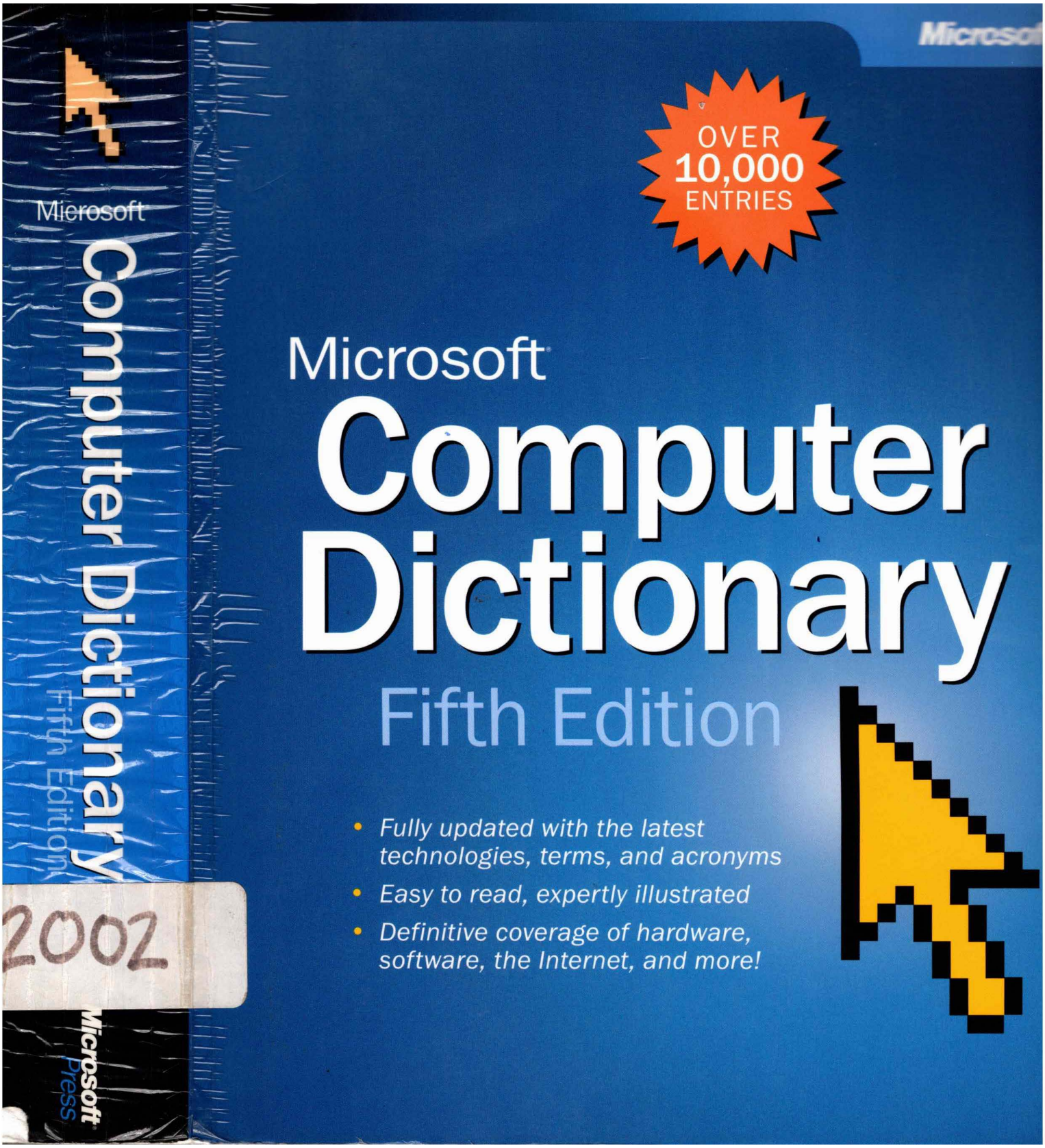


Microsoft

Computer Dictionary

Fifth Edition

OVER 10,000 ENTRIES

The ultimate reference for home, office, or wherever technology takes you!

From broadband to wireless, XML to Xbox™, Tablet PCs to digital TV—here's the one resource that defines over 10,000 technical terms for home and office! The fifth edition of the award-winning MICROSOFT COMPUTER DICTIONARY has been fully updated and expanded with thousands of new entries. You get simple, concise definitions for understanding even the most arcane terms—as well as the newest high-tech acronyms and jargon. From A: (drive) to zettabyte, the MICROSOFT COMPUTER DICTIONARY makes the latest technology accessible to all!

"The *Microsoft Press Computer Dictionary* is the perfect way to clear up a puzzling word or phrase in computer culture."

— Michael Heim, Ph.D.,
Author of *Electric Language* and *Virtual Realism*

Speak the language of computers and the Internet with the MICROSOFT COMPUTER DICTIONARY!

Comprehensive content: Covers everything from smartphones to super-servers, 10Base2 to ;-)

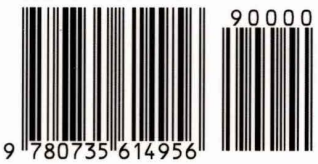
Defines *and* illustrates: Helpful diagrams and drawings complete the picture for complex topics

Relevant to all: Whether you're a home user or an industry professional, you'll find terms and concepts essential to your understanding

To learn more about Microsoft Press® products, visit:
microsoft.com/mspress

Computers/Reference

ISBN 0-7356-1495-4



U.S.A. **$29.99**
Canada $43.99
[*Recommended*]

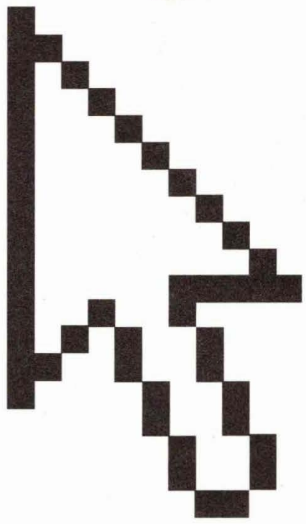
Part No. X08-41956

Microsoft

Microsoft

Microsoft Computer Dictionary

Fifth Edition



PUBLISHED BY
Microsoft Press
A Division of Microsoft Corporation
One Microsoft Way
Redmond, Washington 98052-6399

Library of Congress Cataloging-in-Publication Data
Microsoft Computer Dictionary.--5th ed.
p. cm.
ISBN 0-7356-1495-4
1. Computers--Dictionaries. 2. Microcomputers--Dictionaries.

AQ76.5. M52267 2002
004'.03--dc21 200219714

Printed and bound in the United States of America.

2 3 4 5 6 7 8 9 QWT 7 6 5 4 3 2

Distributed in Canada by H.B. Fenn and Company Ltd.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office or contact Microsoft Press International directly at fax (425) 936-7329. Visit our Web site at www.microsoft.com/mspress. Send comments to *mspinput@microsoft.com*.

Acquisitions Editor: Alex Blanton
Project Editor: Sandra Haynes

Body Part No. X08-41929

Apple Extended Keyboard.

Apple Filing Protocol *n. See* AFP.

Apple key *n.* A key on Apple keyboards labeled with an outline of the Apple logo. On the Apple Extended Keyboard, this key is the same as the Command key, which functions similarly to the Control key on IBM and compatible keyboards. It is generally used in conjunction with a character key as a shortcut to making menu selections or starting a macro.

Apple Macintosh *n. See* Macintosh.

Apple Newton *n. See* Newton.

AppleScript *n.* A script language developed by Apple Computer, Inc., for Macintosh computers running under the Mac OS to execute commands and automate functions. *See also* script.

AppleShare *n.* A file server software developed by Apple Computer, Inc., that works with the Mac OS and allows one Macintosh computer to share files with another on the same network. *See also* file server, Mac OS.

applet *n.* A program that can be downloaded over the Internet and executed on the recipient's machine. Applets are often written in the Java programming language and run within browser software, and they are typically used to customize or add interactive elements to a Web page.

AppleTalk *n.* An inexpensive local area network developed by Apple Computer, Inc., for Macintosh computers that can be used by Apple and non-Apple computers to communicate and share resources such as printers and file servers. Non-Apple computers must be equipped with AppleTalk hardware and suitable software. The network uses a layered set of protocols similar to the ISO/OSI reference model and transfers information in the form of packets called frames. AppleTalk supports connections to other AppleTalk networks through devices known as bridges, and it supports connections to dissimilar networks through devices called gateways. *See also* bridge, frame (definition 2), gateway.

AppleTalk Phase 2 *n.* The extended AppleTalk Internet model designed by Apple Computer, Inc., that supports multiple zones within a network and extended addressing capacity.

AppleWorks *n.* A suite of productivity applications, formerly known as ClarisWorks, distributed by Apple Computer, Inc., and shipped on the iMac computer. AppleWorks/ClarisWorks is an integrated product that includes support for word processing, spreadsheets, databases, drawing, painting, charting, and the Internet.

appliance *n.* **1.** *See* server appliance. **2.** *See* information appliance. **3.** A device with a single or limited purpose with functionality. This functionality is similar to a simple consumer appliance.

appliance server *n.* **1.** An inexpensive computing device used for specific tasks including Internet connectivity or file-and-print services. The server is usually easy to use but does not possess the capabilities or software of a typical server for general office use. **2.** *See* server appliance.

application *n.* A program designed to assist in the performance of a specific task, such as word processing, accounting, or inventory management. *Compare* utility.

application binary interface *n.* A set of instructions that specifies how an executable file interacts with the hardware

authoring language *n.* A computer language or application development system designed primarily for creating programs, databases, and materials for computer-aided instruction (CAI). A familiar example in relation to microcomputers is PILOT, a language used to create lessons. *See also* CAI, PILOT.

authoring software *n.* A type of computer program used for creating Web pages and other hypertext and multimedia applications. Authoring software provides a way to define relationships between different types of objects, including text, graphics, and sound, and to present them in a desired order. This type of program is sometimes known as authorware, although the latter name is generally associated with a specific product from Macromedia. *Also called:* authoring tool.

authoring system *n.* Application software that enables the operator to create and format a document for a specific kind of computer environment. An authoring system, especially for multimedia work, often consists of several applications within the framework of a single, controlling application. *See also* authoring language.

authority *n.* A DNS server responsible for resolving names and IP addresses of sites and resources on the Internet at a particular level of authority: top-level domain, second-level domain, or subdomain.

authorization *n.* In reference to computing, especially remote computers on a network, the right granted an individual to use the system and the data stored on it. Authorization is typically set up by a system administrator and verified by the computer based on some form of user identification, such as a code number or password. *Also called:* access privileges, permission. *See also* network, system administrator.

authorization code *n. See* password.

autoanswer *n. See* answer mode.

autoassociative *adj.* In data reduction or clustering, autoassociative models use the same set of variables as both predictors and targets. In autoassociative neural networks, each pattern presented serves as both the input and output pattern. Autoassociative networks are typically used for tasks involving pattern completion. *See also* artificial intelligence, cluster analysis, neural networks, operator associativity, pattern recognition.

autoattendant *adj.* A term used to describe a store-and-forward computer system that replaces the traditional switchboard operator, directing telephone calls to their correct extensions or voice mail. Autoattendant systems may implement voice prompts, touch-tone menus, or voice recognition features to send calls to their proper destinations. *Compare* interactive voice response systems.

AutoCorrect *n.* A function in Microsoft Word for Windows that automatically corrects errors and makes other substitutions as soon as a user types text. For example, AutoCorrect can be set up to fix misspellings, such as *teh* for *the*, or to change "straight" (" ") quotation marks to "smart" (“ ”) quotation marks. The user can select which AutoCorrect features to enable. *See also* smart quotes.

autodial *n.* A feature enabling a modem to open a telephone line and initiate a call by transmitting a stored telephone number as a series of pulses or tones.

AUTOEXEC.BAT *n.* A special-purpose batch file (set of commands) that is automatically carried out by the MS-DOS operating system when the computer is started or restarted. Created by the user or (in later versions of MS-DOS) by the operating system at system installation, the file contains basic startup commands that help configure the system to installed devices and to the user's preferences.

AutoIP *n.* Short for **auto**matic **I**nternet **P**rotocol addressing. A technique used by a device to obtain a valid IP address without a DHCP server or other IP-configuration authority. With AutoIP, a device randomly chooses an IP address from a set of reserved addresses and queries the local network to determine whether another client already is using that address. The device repeats the steps of picking and verifying until an unused address is found. AutoIP, based on an Internet Engineering Task Force (IETF) Internet Draft, is used in Universal Plug and Play (UPnP) networking. *See also* UPnP networking.

autokey *n. See* typematic.

autoload *vb.* To make some type of resource available without it having to be specifically requested. A program, for example, might autoload fonts or files as they are needed. Similarly, a CD-ROM drive might autoload audio discs or automatically start a setup program on a software CD-ROM. *See also* AutoPlay.

autoloader *n.* A device that automatically prepares a diskette, CD, or other storage medium for use.

data *n.* Plural of the Latin *datum*, meaning an item of information. In practice, *data* is often used for the singular as well as the plural form of the noun. *See also* datum. *Compare* information.

Data Access Objects *n.* A data access interface that communicates with Microsoft Jet and ODBC-compliant data sources to connect to, retrieve, manipulate, and update data and the database structure. *Acronym:* DAO.

data acquisition *n.* The process of obtaining data from another source, usually one outside a specific system.

data aggregate *n.* A collection of data records. It usually includes a description of the placement of the data blocks and their relation to the entire set.

data attribute *n.* Structural information about data that describes its context and meaning.

data bank *n.* Any substantial collection of data.

database *n.* A file composed of records, each containing fields together with a set of operations for searching, sorting, recombining, and other functions. *Acronym:* DB.

database administrator *n.* One who manages a database. The administrator determines the content, internal structure, and access strategy for a database, defines security and integrity, and monitors performance. *Acronym:* DBA. *Also called:* database manager.

database analyst *n.* One who provides the analytic functions needed to design and maintain applications requiring a database.

database designer *n.* One who designs and implements functions required for applications that use a database.

database engine *n.* The program module or modules that provide access to a database management system (DBMS).

database machine *n.* **1.** A peripheral that executes database tasks, thereby relieving the main computer from performing them. **2.** A database server that performs only database tasks.

database management system *n.* A software interface between the database and the user. A database management system handles user requests for database actions and allows for control of security and data integrity requirements. *Acronym:* DBMS. *Also called:* database manager. *See also* database engine.

database manager *n.* *See* database administrator, database management system.

database publishing *n.* The use of desktop publishing or Internet technology to produce reports containing information obtained from a database.

database server *n.* A network node, or station, dedicated to storing and providing access to a shared database. *Also called:* database machine.

database structure *n.* A general description of the format of records in a database, including the number of fields, specifications regarding the type of data that can be entered in each field, and the field names used.

data bit *n.* In asynchronous communications, one of a group of from 5 to 8 bits that represents a single character of data for transmission. Data bits are preceded by a start bit and followed by an optional parity bit and one or more stop bits. *See also* asynchronous transmission, bit, communications parameter.

data buffer *n.* An area in memory where data is temporarily stored while being moved from one location to another. *See also* buffer[1].

data bus *n.* *See* bus.

data cable *n.* Fiber-optic or wire cable used to transfer data from one device to another.

data capture *n.* **1.** The collection of information at the time of a transaction. **2.** The process of saving on a storage medium a record of interchanges between a user and a remote information utility.

data carrier *n.* *See* carrier (definition 1).

Data Carrier Detected *n.* *See* DCD (definition 1).

data chaining *n.* The process of storing segments of data in noncontiguous locations while retaining the ability to reconnect them in the proper sequence.

data channel *n.* *See* channel (definition 1).

data closet *n.* *See* wiring closet.

data collection *n.* **1.** The process of acquiring source documents or data. **2.** The grouping of data by means of classification, sorting, ordering, and other organizing methods.

datacom *n.* Short for **data com**munications. *See* communications.

data communications *n.* *See* communications.

data compaction *n.* *See* data compression.

hot swapping *n. See* hot plugging.

HotSync *n.* Software application from Palm that permits data synchronization between a Palm handheld computing device and another computing device, such as a laptop or personal computer. The synchronization occurs via a cable connection or wirelessly (for example, via infrared signals).

HotWired *n.* A Web site affiliated with *Wired* magazine that contains news, gossip, and other information about the culture of the Internet.

housekeeping *n.* Any of various routines, such as updating the clock or performing garbage collection, designed to keep the system, the environment within which a program runs, or the data structures within a program in good working order.

H

hover button *n.* Text or an image on a Web page, usually in the form of a button, that changes appearance when a cursor passes over it. The hover button may change color, blink, display a pop-up with additional information, or produce other similar effects. Hover buttons are usually implemented through ActiveX objects and scripting, although hover behavior can also be set through HTML attributes.

HPC *n. See* handheld PC.

HPFS *n.* Acronym for **H**igh **P**erformance **F**ile **S**ystem. A file system available with OS/2 versions 1.2 and later. *See also* FAT file system, NTFS.

HPGL *n.* Acronym for **H**ewlett-**P**ackard **G**raphics **L**anguage. A language originally developed for images destined for plotters. An HPGL file consists of instructions that a program can use to reconstruct a graphical image.

HPIB *n.* Acronym for **H**ewlett-**P**ackard **I**nterface **B**us. *See* general-purpose interface bus.

HPPCL *n.* Acronym for **H**ewlett-**P**ackard **P**rinter **C**ontrol **L**anguage. *See* Printer Control Language.

HP/UX or **HP-UX** *n.* Acronym for **H**ewlett-**P**ackard **UNIX**. A version of the UNIX operating system specifically designed to be run on Hewlett-Packard's workstations. *See also* UNIX.

.hqx *n.* A file extension for a file encoded with BinHex. *See also* BinHex.

HREF *n.* Short for **h**ypertext **ref**erence. An attribute in an HTML document that defines a link to another document on the Web. *See also* HTML.

HSB *n.* Acronym for **h**ue-**s**aturation-**b**rightness. A color model in which hue is the color itself as placed on a color wheel, where 0° is red, 60° is yellow, 120° is green, 180° is cyan, 240° is blue, and 300° is magenta; saturation is the percentage of the specified hue in the color; and brightness is the percentage of white in the color. *Also called:* HLS, HSV, hue. *See also* color model. *Compare* CMY, RGB.

HSM *n.* Short for **H**ierarchical **S**torage **M**anagement. A technology for managing online data and data storage in which the medium on which the information resides is linked to the frequency with which the information is accessed. By migrating data to and from primary (rapidly accessed but expensive) and secondary (slower but less expensive) storage, HSM maintains often-used information on primary storage media and less frequently used data on secondary storage such as tape or an optical jukebox. Although information resides on different storage media, all of it appears to be on line and remains accessible to the user. When users request data residing on secondary storage, HSM moves the information back to the primary storage medium.

HSV *n.* Acronym for **h**ue-**s**aturation-**v**alue. *See* HSB.

H-sync *n. See* horizontal synchronization.

HTCPCP *n.* Acronym for **H**yper **T**ext **C**offee **P**ot **C**ontrol **P**rotocol. A protocol defined in jest as an April Fools' Day spoof of open Internet standards. HTCPCP/1.0 was proposed in RFC 2324 on April 1, 1998 by Larry Masinter of Xerox PARC. In this RFC, Masinter described a protocol for controlling, monitoring, and diagnosing coffee pots.

.htm *n.* The MS-DOS/Windows 3.*x* file extension that identifies Hypertext Markup Language (HTML) files, most commonly used as Web pages. Because MS-DOS and Windows 3.*x* cannot recognize file extensions longer than three letters, the .html extension is truncated to three letters in those environments. *See also* HTML.

.html *n.* The file extension that identifies Hypertext Markup Language (HTML) files, most commonly used as Web pages. *See also* HTML.

HTML *n.* Acronym for **H**ypertext **M**arkup **L**anguage. The markup language used for documents on the World Wide Web. A tag-based notation language used to format documents that can then be interpreted and rendered by an Internet browser. HTML is an application of SGML (Standard Generalized Markup Language) that uses tags to mark elements, such as text and graphics, in a document to

indicate how Web browsers should display these elements to the user and should respond to user actions such as activation of a link by means of a key press or mouse click. HTML 2, defined by the Internet Engineering Task Force (IETF), included features of HTML common to all Web browsers as of 1994 and was the first version of HTML widely used on the World Wide Web. HTML+ was proposed for extending HTML 2 in 1994, but it was never implemented. HTML 3, which also was never standardized or fully implemented by a major browser developer, introduced tables. HTML 3.2 incorporated features widely implemented as of early 1996, including tables, applets, and the ability to flow text around images. HTML 4, the latest specification, supports style sheets and scripting languages and includes internationalization and accessibility features. Future HTML development will be carried out by the World Wide Web Consortium (W3C). Most Web browsers, notably Netscape Navigator and Internet Explorer, recognize HTML tags beyond those included in the present standard. *See also* .htm, .html, SGML, tag (definition 3), Web browser.

HTML attribute *n.* A value within an HTML tag that assigns additional properties to the object being defined. Some HTML editing software assigns some attributes automatically when you create an object such as a paragraph or table.

HTML code fragment *n.* HTML code that you add to a Web page to create features such as a script, a counter, or a scrolling marquee. Often used in the context of webrings to add a link and standard graphics or automation to an individual page to indicate membership.

HTML document *n.* A hypertext document that has been coded with HTML. *See* Web page.

HTML editor *n.* A software program used to create and modify HTML documents (Web pages). Most HTML editors include a method for inserting HTML tags without actually having to type out each tag. A number of HTML editors will also automatically reformat a document with HTML tags, based on formatting codes used by the word processing program in which the document was created. *See also* tag (definition 3), Web page.

HTML extensions *n.* A feature or setting that is an extension to the formal HTML specification. Extensions may not be supported by all Web browsers, but they may be used widely by Web authors. An example of an extension is marquee scrolling text.

HTML page *n. See* Web page.

HTML server control *n.* An ASP.NET server control that belongs to the System.Web.UI.HtmlControls namespace. An HTML server control maps directly to an HTML element and is declared on an ASP.NET page as an HTML element marked by a runat=server attribute. In contrast to Web server controls, HTML server controls do not have an <asp:ControlName> tag prefix. *See also* Web server control.

HTML source *n. See* source (definition 2).

HTML source file *n. See* source (definition 2).

HTML tag *n. See* tag (definition 3).

HTML validation service *n.* A service used to confirm that a Web page uses valid HTML according to the latest standard and/or that its hyperlinks are valid. An HTML validation service can catch small syntactical errors in HTML coding as well as deviations from the HTML standards. *See also* HTML.

HTTP *n.* Acronym for **H**ypertext **T**ransfer **P**rotocol. The protocol used to carry requests from a browser to a Web server and to transport pages from Web servers back to the requesting browser. Although HTTP is almost universally used on the Web, it is not an especially secure protocol.

HTTPd *n.* Acronym for **H**ypertext **T**ransfer **P**rotocol **D**aemon. A small, fast HTTP server that was available free from NCSA. HTTPd was the predecessor for Apache. *Also called:* HTTP Daemon. *See also* Apache, HTTP server, NCSA (definition 1).

HTTP Daemon *n. See* HTTPd.

HTTP Next Generation *n. See* HTTP-NG.

HTTP-NG *n.* Acronym for **H**ypertext **T**ransfer **P**rotocol **N**ext **G**eneration. A standard under development by the World Wide Web Consortium (W3C) for improving performance and enabling the addition of features such as security. Whereas the current version of HTTP establishes a connection each time a request is made, HTTP-NG will set up one connection (which consists of separate channels for control information and data) for an entire session between a particular client and a particular server.

HTTPS *n.* **1.** Acronym for **H**ypertext **T**ransfer **P**rotocol **S**ecure. A variation of HTTP that provides for encryption and transmission through a secure port. HTTPS was devised by Netscape and allows HTTP to run over a security mechanism known as SSL (Secure Sockets Layer). *See also* HTTP, SSL. **2.** Web server software for Windows NT. Developed by the European Microsoft Windows NT Academic Centre (EMWAC) at the University of Edinburgh,

N

n *prefix* *See* nano-.

NACN *n.* *See* North American Cellular Network.

nagware *n.* Slang for computer shareware that, on starting or before closing, displays a prominent reminder to pay for the program. *See also* shareware.

NAK *n.* Acronym for **n**egative **ack**nowledgement. A control code, ASCII character 21 (hexadecimal 15), transmitted to a sending station or computer by the receiving unit as a signal that transmitted information has arrived incorrectly. *Compare* ACK.

NAK attack *n.* Acronym for **n**egative **ack**nowledgement **attack**. A hacker attack that uses the negative acknowledgement control code character to enter a seemingly secure system. A NAK attack uses weaknesses in the system handling NAK replies that may leave it temporarily unprotected. *See also* NAK.

N

naked PC *n.* A personal computer sold without an operating system (OS) installed. The purchaser of a naked PC must then choose and install an OS before the computer can be used. Naked PCs are chiefly purchased by users with some degree of expertise with computer equipment who may want to install a version of Linux or an offshoot OS. Computer and software manufacturers have expressed concern over the possibility of software piracy with the sale of naked PCs.

.name *n.* One of seven new top-level domain names approved in 2000 by the Internet Corporation for Assigned Names and Numbers (ICANN), .name is meant for registration by individuals for personal Web sites. The seven new domain names became available for use in the spring of 2001.

Name Binding Protocol *n.* *See* NBP.

named anchor *n.* In HTML, a tag within a document that can act as a destination for a hyperlink. Named anchors are useful because they allow a link to a specific location within a document. *Also called:* named target. *See also* anchor (definition 2), HTML, hyperlink.

named entity *n.* *See* character entity.

named pipes *n.* In programming, one-way (simplex) or two-way (duplex) connections used to transfer data between processes. Named pipes are portions of memory set aside for temporary data storage. They are created by server processes and can be used simultaneously by more than one client process, each accessing a separate instance with its own buffers and handles. Named pipes can be used to transfer data either locally or on a network.

named target *n.* *See* named anchor.

name server *n.* *See* CSO name server, DNS server.

namespace *n.* **1.** A grouping of one or more names that represent individual objects within the group in a shared computing environment, such as a network. The names within a namespace are unique, are created according to the same rules, and can be resolved into a particular identifying item of information, such as an IP address or a network device. A namespace can be either flat—a single collection of unique names—or hierarchical, as is the Internet's DNS (Domain Name System), which is based on a treelike structure that is refined through successive levels beginning with the root server and the Internet's top-level domains (.com, .net, .org, and so on). In everyday terms, a namespace is comparable to a telephone book, in which each name is unique and resolves to the phone number and address of a particular individual, business, or other entity. **2.** A means of identifying elements and attributes in an XML document by assigning them a two-part name with the first part being the namespace and the second part being the functional name. A namespace identifies a set of names to prevent confusion when multiple objects with identical functional names are taken from different sources and brought together in the same XML document. Namespaces typically reference a Uniform Resource Identifier (URI) because each URI will be unique.

name-value pair *n.* **1.** In the Perl programming language, a data set in which the data is associated with a name. *See also* Perl. **2.** In CGI programming, one of the data items collected from an HTML form by the browser and passed

reuse a disk that already contains programs or data, effectively destroying the existing contents.

refresh *vb.* **1.** To retrace a video screen at frequent intervals, even if the image does not change, so as to keep the phosphors irradiated. **2.** To recharge dynamic random access memory chips (DRAMs) so that they continue to retain the information stored in them. Circuitry on the memory board automatically performs this function. *See also* refresh cycle.

refreshable *adj.* In programming, referring to a program module capable of being replaced in memory without affecting processing of the program or the information being used by the program.

refresh cycle *n.* The process in which controller circuitry provides repeated electric pulses to dynamic random access memory chips in order to renew the stored electric charges in those locations that contain binary 1. Each pulse is one refresh cycle. Without constant refreshing, dynamic semiconductor RAM loses any information stored in it—as it does when the computer is turned off or when the power fails. *See also* dynamic RAM, static RAM.

refresh rate *n.* In reference to video hardware, the frequency with which the entire screen is redrawn to maintain a constant, flicker-free image. On TV screens and raster-scan monitors, the electron beam that lights the phosphor coating on the inner surface of the screen typically refreshes the entire image area at a rate of about 60 hertz, or 60 times per second. Interlaced monitors, which redraw alternate lines during each sweep of the electron beam, actually refresh any particular line only 30 times per second. Because odd and even lines are refreshed on successive sweeps, however, the effective refresh rate is 60 times per second. *See also* refresh (definition 1).

REGEDIT *n. See* Registry Editor.

regenerate *vb. See* rewrite.

regeneration buffer *n. See* video buffer.

regenerator *n. See* repeater.

region *n.* **1.** An area dedicated to or reserved for a particular purpose. **2.** In video programming, a contiguous group of pixels that are treated as a unit. On the Apple Macintosh, for example, a region is an area in a grafPort that can be defined and manipulated as an entity. The visible working area within a window is an example of a region. *See also* grafPort.

region code *n.* Codes on DVD movie titles and DVD-ROM drives that prevent playback of certain DVDs in certain geographical regions. Region codes are part of the DVD specification. *See also* CSS, DeCSS.

region fill *n.* In computer graphics, the technique of filling a defined region on the screen with a selected color, pattern, or other attribute. *See also* region (definition 2).

register *n.* A set of bits of high-speed memory within a microprocessor or other electronic device, used to hold data for a particular purpose. Each register in a central processing unit is referred to in assembly language programs by a name such as *AX* (the register that contains the results of arithmetic operations in an Intel 80x86 processor) or *SP* (the register that contains the memory address of the top of the stack in various processors).

registered file type *n.* File types that are tracked by the system registry and are recognized by the programs you have installed on your computer. *See also* file type.

registration *n.* The process of precisely aligning elements or superimposing layers in a document or a graphic so that everything will print in the correct relative position. *See also* registration marks.

registration marks *n.* Marks placed on a page so that in printing, the elements or layers in a document can be arranged correctly with respect to each other. Each element to be assembled contains its own registration marks; when the marks are precisely superimposed, the elements are in the correct position. See the illustration.

Registration marks.

registry *n.* A central hierarchical database in Windows 9x, Windows CE, Windows NT, and Windows 2000 used to store information necessary to configure the system for one or more users, applications, and hardware devices. The Registry contains information that Windows continually references during operation, such as profiles for each user, the applications installed on the computer and the types of documents each can create, property sheet settings for folders and application icons, what hardware exists on the system, and which ports are being used. The Registry replaces most of the text-based .ini files used in Windows 3. *x* and MS-DOS configuration files, such as AUTOEXEC.BAT and CONFIG.SYS. Although the Registry is common to the several Windows platforms, there

are some differences among them. *Also called:* system registry. *See also* hierarchical database, .ini, input/output port, property sheet, Registry Editor.

Registry Editor *n.* An application under Windows that allows the user to edit the entries in the registry. *Acronym:* REGEDIT. *See also* registry.

regression analysis *n.* In statistics, an analysis of the degree to which variations in an independent variable affect a dependent variable (a variable whose value depends on the value of another variable). *See also* multiple regression.

regression testing *n.* Complete retesting of a modified program, rather than a test of only the modified routines, to ensure that no errors have been introduced with the modifications.

relation *n.* A structure composed of attributes (individual characteristics, such as name or address, corresponding to the columns in a table) and tuples (sets of attribute values describing particular entities, such as customers, corresponding to the rows in a table). Within a relation, tuples cannot be repeated; each must be unique. Further, tuples are unordered within a relation; interchanging two tuples does not change the relation. Finally, if relational theory is to be applicable, the domain of each attribute must be atomic—that is, a simple value, rather than a structure such as an array or a record. A relation in which the domains of all attributes are atomic is said to be normalized or in first normal form. *See also* normal form (definition 1).

relational algebra *n.* A collection of rules and operators that permits relations (tables) to be manipulated. Relational algebra is usually described as having the following operators: SELECT, PROJECT, PRODUCT, UNION, INTERSECT, DIFFERENCE, JOIN (or INNER JOIN), and DIVIDE. In a relational database, relational algebra is used to develop procedures to build new relations based on the existing relations.

relational calculus *n.* In database management, a nonprocedural method for manipulating relations (tables). There are two families of relational calculus: domain calculus and tuple calculus. The two families of relational calculus are mathematically equivalent to each other and to relational algebra. Using either family, one can formulate a description of a desired relation, based on the existing relations in the database.

relational database *n.* A database or database management system that stores information in tables—rows and columns of data—and conducts searches by using data in specified columns of one table to find additional data in another table. In a relational database, the rows of a table represent records (collections of information about separate items) and the columns represent fields (particular attributes of a record). In conducting searches, a relational database matches information from a field in one table with information in a corresponding field of another table to produce a third table that combines requested data from both tables. For example, if one table contains the fields EMPLOYEE-ID, LAST-NAME, FIRST-NAME, and HIRE-DATE, and another contains the fields DEPT, EMPLOYEE-ID, and SALARY, a relational database can match the EMPLOYEE-ID fields in the two tables to find such information as the names of all employees earning a certain salary or the departments of all employees hired after a certain date. In other words, a relational database uses matching values in two tables to relate information in one to information in the other. Microcomputer database products typically are relational databases. *Compare* flat-file database, inverted-list database.

relational database management system *n. See* relational database.

relational expression *n.* An expression that uses a relational operator such as "less than" or "greater than" to compare two or more expressions. A relational expression resolves to a Boolean (true/false) value. *See also* Boolean, relational operator.

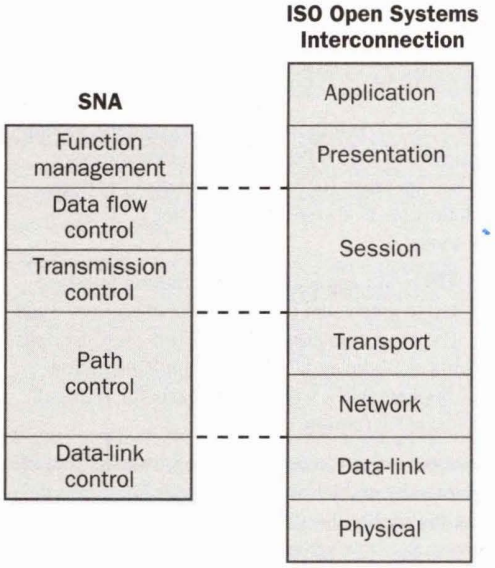
relational model *n.* A data model in which the data is organized in relations (tables). This is the model implemented in most modern database management systems.

relational operator *n.* An operator that allows the programmer to compare two (or more) values or expressions. Typical relational operators are greater than (>), equal to (=), less than (<), not equal to (<>), greater than or equal to (>=), and less than or equal to (<=). *See also* relational expression.

relational structure *n.* The record organization used in the implementation of a relational model.

relative address *n.* A location, as in a computer's memory, that is specified in terms of its distance (displacement or offset) from a starting point (base address). A relative

ence model. More recently, the SNA model was modified to include minicomputers and microcomputers in a specification known as APPC (Advanced Program to Program Communications). See the illustration. *See also* APPC. *Compare* ISO/OSI reference model.



SNA. *Comparable (not compatible) layers in the SNA and ISO/OSI architechures.*

snail mail *n.* A popular phrase on the Internet for referring to mail services provided by the U.S. Postal Service and similar agencies in other countries. The term has its origins in the fact that regular postal mail is slow compared with e-mail.

snap-in *n.* **1.** *See* plug-in. **2.** A software component that provides system administration and system management capability within the framework of the Microsoft Management Console (MMC) for Windows NT, Windows 2000, and Windows XP. A snap-in (also capitalized as Snap-In) is a COM object that represents one unit of management behavior, the smallest extension available through the MMC. There are two types of snap-ins: stand-alone (not reliant on any other snap-in) and extension (invoked by a parent snap-in). Multiple snap-ins can be combined to create larger management tools.

snapshot *n.* A copy of main memory or video memory at a given instant, sent to the printer or hard disk. *Also called:* snapshot dump. *See also* screen dump.

snapshot program *n.* A program that performs a trace by taking a snapshot of certain chunks of memory at specified times.

.snd *n.* A file extension for a type of interchangeable sound file format used on Sun, NeXT, and Silicon Graphics computers, consisting of raw audio data preceded by a text identifier.

sneaker *n.* An individual employed by a company or organization to test their security by breaking into the employer's network. Information gathered by the sneaker can be used to repair network security weaknesses. *See also* tiger team.

sneakernet *n.* Transfer of data between computers that are not networked together. The files must be written onto floppy disks on the source machine, and a person must physically transport the disks to the destination machine.

sniffer *n.* *See* packet sniffer.

SNMP *n.* Acronym for **S**imple **N**etwork **M**anagement **P**rotocol. The network management protocol of TCP/IP. In SNMP, agents, which can be hardware as well as software, monitor the activity in the various devices on the network and report to the network console workstation. Control information about each device is maintained in a structure known as a management information block. *See also* agent (definition 4), TCP/IP.

SNOBOL *n.* Acronym for **S**trin**g**-**O**riented Sym**bol**ic Language. A string- and text-processing language developed between 1962 and 1967 by Ralph Griswold, David Farber, and I. Polonsky at AT&T Bell Laboratories. *See also* string.

snow *n.* **1.** In television, temporary distortion of a displayed image caused by interference, usually in a weak signal, that takes the form of random white spots. **2.** In computer displays, a specific type of distortion characterized by the blinking on and off of random pixels that occurs when the microprocessor and the display hardware interfere with each other by attempting to use the computer's video memory at the same time.

SOAP *n.* Acronym for **S**imple **O**bject **A**ccess **P**rotocol. A simple, XML-based protocol for exchanging structured and type information on the Web. The protocol contains

no application or transport semantics, which makes it highly modular and extensible.

SOC *n.* Acronym for **s**ystem **o**n a **c**hip. A chip integrating computer, microprocessors, and all necessary support components in a single unit. SOC technology is used in firewalls, gateways, specialized servers, and interactive devices like Web pads and vending machines.

social engineering *n.* The practice of penetrating system security by tricking individuals into divulging passwords and information about network vulnerabilities. Often done by calling the individual on phone and pretending to be another employee of company with a computer-related question.

Society for Information Management *n.* A professional society based in Chicago for information systems executives, formerly the Society for Management Information Systems. *Acronym:* SIM.

Society for Management Information Systems *n. See* Society for Information Management.

socket *n.* **1.** An identifier for a particular service on a particular node on a network. The socket consists of a node address and a port number, which identifies the service. For example, port 80 on an Internet node indicates a Web server. *See also* port number, sockets API. **2.** The receptacle part of a connector, which receives a plug. *See also* female connector. **3.** A receptacle on a PC motherboard into which a microprocessor is plugged. A socket-mounted microprocessor, such as the Pentium, connects to the motherboard through numerous pins on the underside. Newer Intel microprocessors, such as the Pentium II and later, plug into the motherboard through an edge connector along the side of the chip. *See also* socket 4, socket 5, socket 7, socket 8. *Compare* Slot 1, Slot 2.

socket 4 *n.* A 5-volt mounting socket on a PC motherboard designed to hold a Pentium microprocessor operating at 60 MHz or 66 MHz. Socket 4 includes openings for 273 pins. *See also* Pentium, socket (definition 3). *Compare* Slot 1, Slot 2, socket 5, socket 7, socket 8.

socket 5 *n.* A 3.3-volt mounting socket on a PC motherboard designed to hold a Pentium microprocessor operating at the following speeds: 75, 90, 100, 120, 133, 150, 166, 180, and 200 MHz. Socket 5 includes openings for 320 pins. It has been superceded by socket 7, socket 8, slot 1, and slot 2. *See also* Pentium, socket (definition 3). *Compare* Slot 1, Slot 2, socket 4, socket 7, socket 8.

socket 7 *n.* A mounting socket on a PC motherboard designed to hold a microprocessor operating at the following speeds: 150, 166, 180, 200, 210, and 233 MHz. Socket 7 includes openings for 321 pins and operates at two voltages, 2.5 volts at the core and 3.3 volts input/output. It is used with the Pentium MMX chip and competitive microprocessor chips from other manufacturers, such as AMD and Cyrix. *See also* MMX, Pentium, socket (definition 3). *Compare* Slot 1, Slot 2, socket 4, socket 5, socket 8.

socket 8 *n.* A 2.5-volt mounting socket on a PC motherboard designed to hold a Pentium Pro microprocessor. Socket 8 has openings for 387 pins. *See also* Pentium, socket (definition 3). *Compare* Slot 1, Slot 2, socket 4, socket 5, socket 7.

sockets API *n.* An application programming interface implemented to create and use sockets in client/server networking. The most common sockets API is the University of California at Berkeley UNIX/BSD implementation (Berkeley Sockets API), which is the basis for Winsock. *See also* socket (definition 1).

soc. newsgroups *n.* Usenet newsgroups that are part of the soc. hierarchy and have the prefix soc. These newsgroups are devoted to discussions of current events and social issues. Soc. newsgroups are one of the seven original Usenet newsgroup hierarchies. The other six are comp., misc., news., rec., sci., and talk. *See also* newsgroup, traditional newsgroup hierarchy, Usenet.

soft *adj.* **1.** In computing, temporary or changeable. For example, a soft error is a problem from which the system can recover, and a soft patch is a temporary program fix that holds only while the program is running. *Compare* hard (definition 1). **2.** In electronics, characterized by magnetic materials that do not retain their magnetism when a magnetic field is removed. *Compare* hard (definition 2).

soft boot *n. See* warm boot.

soft copy *n.* The temporary images presented on a computer display screen. *Compare* hard copy.

soft error *n.* An error from which a program or operating system is able to recover. *Compare* hard error.

soft font *n. See* downloadable font.

soft hyphen *n. See* hyphen.

soft link *n. See* symbolic link.

softmodem *n. See* software-based modem.

Unified Modeling Language *n. See* UML.

Uniform Computer Information Transactions Act *n. See* UCITA.

Uniform Data Transfer *n. See* UDT.

Uniform Memory Access *n. See* SMP.

Uniform Naming Convention *n. See* UNC.

Uniform Resource Citation *n.* A description of an object on the World Wide Web, consisting of pairs of attributes and their values, such as the Uniform Resource Identifiers (URIs) of associated resources, author names, publisher names, dates, and prices. *Acronym:* URC.

Uniform Resource Identifier *n.* A character string used to identify a resource (such as a file) from anywhere on the Internet by type and location. The set of Uniform Resource Identifiers includes Uniform Resource Names (URNs) and Uniform Resource Locators (URLs). *Acronym:* URI. *See also* relative URL, Uniform Resource Name, URL.

Uniform Resource Locator *n. See* URL.

Uniform Resource Name *n.* A scheme for uniquely identifying resources that might be available on the Internet by name, without regard to where they are located. The specifications for the format of Uniform Resource Names are still under development by the Internet Engineering Task Force (IETF). They include all Uniform Resource Identifiers (URIs) having the schemes urn:, fpi:, and path:; that is, those that are not Uniform Resource Locators (URLs). *Acronym:* URN. *See also* IETF, Uniform Resource Identifier, URL.

UniForum *n.* **1.** The International Association of Open System Professionals, an organization of UNIX users and administrators. **2.** A series of UNIX trade shows sponsored by UniForum and managed by Softbank COMDEX, Inc. *See also* COMDEX.

Unimodem *n.* **1.** The universal modem driver, provided with Windows CE, that translates Telephony Service Provider Interface (TSPI) calls into AT commands and sends the commands to a virtual device driver that talks to the modem. **2.** A universal modem that supports standard modem AT commands. Windows CE currently supports only PCMCIA modems.

uninstall *vb.* To remove software completely from a system, including the elimination of files and components residing in system locations such as the registry in Windows 9x, Windows NT, or Windows 2000. Some applications have built-in uninstall utilities, and in other cases a separate uninstall program can be used. *Also called:* deinstall.

uninterruptible power supply *n. See* UPS.

union *n.* **1.** In set theory, the smallest combination of two sets that contains all elements of both sets. **2.** In logic, an inclusive OR operation—that is, the result, C, of any union of A and B is true (1) except when A and B are both false (0). See the table. **3.** In programming, a structure that can be used to store different types of variables (such as integer, character, or Boolean). **4.** In database management, a relational operator. Given two relations (tables), A and B, that are union-compatible (contain the same number of fields, with corresponding fields containing the same types of values), A UNION B builds a new relation containing those tuples (records) that appear either in A or in B or in both. *Compare* difference, intersect.

Table U.1 A Truth Table Showing the Results of Unions.

A	*OR*	*B*	=	*C*
1		1		1
1		0		1
0		1		1
0		0		0

union-compatible *adj.* In database management, of, pertaining to, or characteristic of two relations (tables) that are of the same order (have the same number of attributes) and whose corresponding attributes are based on the same domain (the set of acceptable values).

unipolar *adj.* Having one state. In electronics, a unipolar device or signal is one in which the same voltage polarity (positive or negative) is used to represent binary states—on/off or true/false. *Compare* bipolar.

unique user *n.* An individual visitor to a Web site. Tracking unique users is important in ascertaining the success of a given Web site because it indicates how many different visitors access the site, as opposed to the number of hits—visits by the same or different individuals—the site receives. *Also called:* unique visitor.

unique visitor *n. See* unique user.

United States of America Standards Institute *n.* The former name of the American National Standards Institute. *See also* ANSI.

user interface *n.* The portion of a program with which a user interacts. Types of user interfaces, or UIs, include command-line interfaces, menu-driven interfaces, and graphical user interfaces. *Acronym:* UI.

User Interface Toolbox *n. See* Toolbox.

username *n.* The name by which a user is identified to a computer system or network. During the logon process, the user must enter the username and the correct password. If the system or network is connected to the Internet, the username generally corresponds to the leftmost part of the user's e-mail address (the portion preceding the @ sign, as in username@company.com). *See also* e-mail address, logon.

user name *n.* The name by which a person is known and addressed on a communications network. *See also* alias (definition 2).

user profile *n.* A computer-based record maintained about an authorized user of a multiuser computer system. A user profile is needed for security and other reasons; it can contain such information as the person's access restrictions, mailbox location, type of terminal, and so on. *See also* user account.

user state *n.* The least privileged of the modes in which a Motorola 680x0 microprocessor can operate. This is the mode in which application programs are run. *See also* 68000. *Compare* supervisor state.

USnail *n.* **1.** Slang for the United States Postal Service. USnail, a term used on the Internet, is a reference to how slow the postal service is in comparison to e-mail. **2.** Mail delivered by the United States Postal Service. *See also* snail mail.

/usr *n.* A directory in a computer system that contains subdirectories owned or maintained by individual users of the computer system. These subdirectories can contain files and additional subdirectories. Typically, /usr directories are used in UNIX systems and can be found on many FTP sites. *See also* FTP site.

USRT *n.* Acronym for **u**niversal **s**ynchronous **r**eceiver-**t**ransmitter. A module, usually composed of a single integrated circuit, that contains both the receiving and transmitting circuits required for synchronous serial communication. *Compare* UART.

UTC *n. See* Universal Time Coordinate.

UTF-8 *n.* Acronym for **U**CS **T**ransformation **F**ormat **8**. A character set for protocols evolving beyond the use of ASCII. The UTF-8 protocol provides for support of extended ASCII characters and translation of UCS-2, an international 16-bit Unicode character set. UTF-8 enables a far greater range of names than can be achieved using ASCII or extended ASCII encoding for character data. *See also* ASCII, Unicode.

utility *n.* A program designed to perform a particular function; the term usually refers to software that solves narrowly focused problems or those related to computer system management. *See also* application.

utility program *n.* A program designed to perform maintenance work on the system or on system components (for example, a storage backup program, disk and file recovery program, or resource editor).

UTP *n.* Acronym for **u**nshielded **t**wisted **p**air. A cable containing one or more twisted pairs of wires without additional shielding. UTP is more flexible and takes up less space than shielded twisted-pair (STP) cable but has less bandwidth. See the illustration. *See also* twisted-pair cable. *Compare* STP.

UTP.

.uu *n.* The file extension for a binary file that has been translated into ASCII format using uuencode. *Also called:* .uud. *See also* ASCII, binary file, uuencode[1]. *Compare* .uue.

UUCP *n.* Acronym for **U**NIX-to-**U**NIX **Cop**y. A set of software programs that facilitates transmission of information between UNIX systems using serial data connec-

webcast[1] *n.* Live or delayed audio or video programming delivered to users over the Web. Downloading these broadcasts requires a user to have the appropriate video or audio application, such as RealPlayer. The necessary application is usually available from the webcaster without cost.

webcast[2] *vb.* To produce and disseminate Web-based audio, video, and text programming.

webcaster *n.* A company or organization that produces and disseminates Web-based audio, video, and text programming.

webcasting *n.* Popular term for broadcasting information via the World Wide Web, using push and pull technologies to move selected information from a server to a client. An emergent technology in 1997, webcasting was developed to provide users with customized content—for example, sports, news, stocks, and weather—that can be updated both regularly and automatically. Webcasting gives users the ability to specify the type of content they want to see, and it gives content providers a means of delivering such information directly to the user's desktop. *Also called:* netcasting. *See also* pull, push (definition 2).

Web clipping *n.* A Web service that delivers brief snippets of information to handheld Web-enabled devices, such as wireless phones and personal digital assistants. Rather than opening a Web site and browsing for information, Web clipping allows a customer to request specific types of information from a service. The Web clipping service then downloads the information to the handheld device.

web CLUT *n.* *See* browser CLUT.

Web container *n.* A container that implements the Web component contract of Sun Microsystems's Java 2 Platform Enterprise Edition (J2EE) network architecture. This contract specifies a run time environment for Web components that includes security, concurrency, life cycle management, transaction, deployment, and other services. Provided by a Web or J2EE server, a Web container provides the same services as a JavaServer Pages (JSP) container and provides a federated view of the J2EE platform APIs. *See also* API, container, J2EE, JSP container, servlet container.

Web cramming *n.* A common form of fraud in which Internet Service Providers (ISPs) add charges to the monthly bill for fictitious services or for services the customer had been told were free.

WebCrawler *n.* A World Wide Web search engine operated by America Online. *See also* search engine.

WebDAV *n.* Short for **W**eb **D**istributed **A**uthoring and **V**ersioning. A set of extensions to the HTTP protocol that allows users to collaboratively edit, publish, and manage resources on the World Wide Web. WebDAV-enabled additions to HTTP include document writing, editing, and publishing tools and search, storage, and file sharing options.

Web development *n.* The design and coding of World Wide Web pages.

Web directory *n.* A list of Web sites, giving the URL and a description of each. *See also* URL.

Web Distributed Authoring and Versioning *n.* *See* WebDAV.

Web Forms *n.* The ASP.NET page framework, which consists of programmable Web pages (called Web Forms pages) that contain reusable server controls. *See also* ASP.NET server control.

Web hosting *n.* *See* hosting.

Web index *n.* A Web site intended to enable a user to locate other resources on the Web. The Web index may include a search facility or may merely contain individual hyperlinks to the resources indexed.

Weblication *n.* Slang for Web application. *See* Web application.

Weblog or **weblog** or **web log** *n.* A Web site that has regularly updated content reflecting the interests of the site's host. Often, but not always, the content is in journal form, has highlights of news and information from other Web sites, and is presented from a personal point of view. On some sites, the Weblog is a collaboration between visitors to the site. The high-tech-oriented Slashdot.org is frequently cited as being among the best-known Weblogs.

Webmaster or **webmaster** *n.* A person responsible for creating and maintaining a World Wide Web site. A Webmaster is often responsible for responding to e-mail, ensuring the site is operating properly, creating and updating Web pages, and maintaining the overall structure and design of the site. *Also called:* webmistress, webweaver.

webmistress *n.* *See* Webmaster.

webographics *n.* Demographics of Web users specifically focusing on surfing and online shopping habits and on other related information, such as connection method, browser, and platform.

WebPad *n.* A class of wireless Internet appliances offering full Internet and personal digital assistant (PDA) functions. A WebPad features a larger LCD screen than other handheld communications devices and resembles a tablet.

Web page *n.* A document on the World Wide Web. A Web page consists of an HTML file, with associated files for graphics and scripts, in a particular directory on a particular machine (and thus identifiable by a URL). Usually a Web page contains links to other Web pages. *See also* URL.

Web page embedding *n.* Embedding a digital streaming media player directly onto a Web page using HTML code. Rather than displaying a hyperlink to the media file, Web page embedding uses browser plug-ins to present the media player as a visual element in the layout of the Web page.

Web phone *n. See* Internet telephone.

Web Presence Provider *n.* A Web hosting and Internet service provider who manages the Web server hardware and software required to make a Web site available on the Internet. *Acronym:* WPP.

Web rage *n.* **1.** Anger or frustration related to the use or operation of the Internet. **2.** An intemperate, rude, or angry posting on the Internet; a flame. **3.** The latest fad to gain popularity among Web users.

websafe palette *n. See* browser CLUT.

Web server *n. See* HTTP server.

Web server control *n.* An ASP.NET server control that belongs to the System.Web.UI.WebControls namespace. Web server controls are richer and more abstract than HTML server controls. A Web server control has an <asp:ControlName> prefix on an ASP.NET page. *See also* ASP.NET server control, HTML server control, namespace.

Web services *n.* A modular collection of Web protocol–based applications that can be mixed and matched to provide business functionality through an Internet connection. Web services can be used over the Internet or an intranet to create products, business processes, and B2B interactions. Web services use standard Internet protocols such as HTTP, XML, and SOAP to provide connectivity and interoperability between companies.

Web Services Description Language *n. See* WSDL.

Web site *n.* A group of related HTML documents and associated files, scripts, and databases that is served up by an HTTP server on the World Wide Web. The HTML documents in a Web site generally cover one or more related topics and are interconnected through hyperlinks. Most Web sites have a home page as their starting point, which frequently functions as a table of contents for the site. Many large organizations, such as corporations, will have one or more HTTP servers dedicated to a single Web site. However, an HTTP server can also serve several small Web sites, such as those owned by individuals. Users need a Web browser and an Internet connection to access a Web site. *See also* home page, HTML, HTTP server (definition 1), Web browser.

Web Storage System *n.* The storage component of Exchange 2000 Server and SharePoint Portal servers, which integrates Web server, database, file system, and workgroup functionality. The Web Storage System lets you store and share many types of data in a single integrated system. *Acronym:* WSS.

Web switch *n.* A network device—a switch—designed to optimize Web traffic routing by using the information embedded in HTTP requests to route the requests to the most appropriate servers, no matter where they are located. Web switches are intended to address issues of speed, scalability, and performance for high-volume Web sites. *See also* switch.

Web terminal *n.* A system containing a central processing unit (CPU), RAM, a high-speed modem or other means of connecting to the Internet, and powerful video graphics, but no hard disk, intended to be used solely as a client to the World Wide Web rather than as a general-purpose computer. *Also called:* network computer.

Web-to-host *n.* A service that allows remote users to access programs and data on legacy or mainframe systems through a Web browser. Web-to-host packages typically include a combination of services such as emulation support, legacy access, centralized management, host services, and security options, with some degree of customization possible. *See also* legacy system, mainframe computer.

WebTV *n.* A system that provides consumers with the ability to access the Web as well as send and receive e-mail on a television by means of a set-top box equipped with a modem. Users must have an ISP (Internet service provider) and subscribe to the WebTV Network. Developed by WebTV Networks, WebTV was purchased by Microsoft in 1996.

write protected (though not necessarily infallibly). *See also* write-protect notch.

write-protect notch *n.* A small opening in the jacket of a floppy disk that can be used to make the disk unwritable. On a 5.25-inch floppy disk, the write-protect notch is a rectangular hole on the edge of the disk jacket. When this notch is covered, a computer can read from the disk but cannot record new information on it. On 3.5-inch microfloppy disks that are enclosed in plastic shells, the write-protect notch is an opening in a corner. When the sliding tab in this opening is moved to uncover a small hole, the disk is protected and cannot be written to. *Also called:* write-protect tab. *See also* write[2].

write-protect tab *n. See* write-protect notch.

write-through cache *n.* A type of cache in which changes made to cached data are simultaneously made in the original copy, rather than being marked for later updating. A write-through cache, though not as fast as a write-back cache, is needed in situations where problems would occur if both the original and cached data did not match. *Compare* write-back cache.

.wrl *n.* File extension required for saving all Virtual Reality Modeling Language (VRML) documents; for example, cube.wrl. *See also* VRML.

WSDL *n.* Acronym for **W**eb **S**ervices **D**escription **L**anguage. An XML format developed to allow for better interoperability among Web services and development tools. WSDL describes network services as collections of communication endpoints capable of exchanging messages and is extensible to allow description of endpoints and their messages regardless of what message formats or network protocols are used to communicate.

WSS *n. See* Web Storage System.

WTLS *n.* Acronym for **W**ireless **T**ransport **L**ayer **S**ecurity. A security protocol that provides encryption and authentication services for the Wireless Application Protocol (WAP). The WTLS layer uses data integrity, authentication, and encryption mechanisms to provide end-to-end security and privacy for wireless transactions. WTLS is based on Transport Layer Security (TLS), a Secure Socket Layer equivalent used with Internet applications. *See also* Wireless Application Protocol.

WWW *n. See* World Wide Web.

WYSBYGI *adj.* Acronym for **W**hat **Y**ou **S**ee **B**efore **Y**ou **G**et **I**t. Providing a preview of the effects of the changes the user has selected before the changes are finally applied. For example, a dialog box in a word processing program might display a sample of the font a user has chosen before the font is actually changed in the document. The user can cancel any changes after previewing them, and the document will be unaffected. *See also* WYSIWYG.

WYSIWYG *adj.* Acronym for **W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et, pronounced "wizzywig." Allowing a user to view a document as it will appear in the final product, and to directly edit the text, graphics, or other elements within that view. A WYSIWYG language is often easier to use than a markup language, which provides no immediate visual feedback regarding the changes being made. *Compare* markup language.