

WEBSTER'S NEW WORLD™

DICTIONARY — of — COMPUTER TERMS

EIGHTH EDITION

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Dedication

For Suzanne, always

Webster's New World™ Dictionary of Computer Terms,
8th Edition

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Introduction

We live in a computerized society—and, increasingly, knowledge
of computer terminology paves the way to personal and profes-
sional advancement.

- Commerce on the Internet is now estimated to make a
contribution in excess of \$300 billion annually to the U.S.
economy. If you want to be part of this, you'll need to
know why *strong authentication* is necessary, how to tell the
difference between a *digital signature* and a *certificate*, and
why *cookies* are needed to implement virtual *shopping carts*.
- Computer knowledge and expertise bring big payoffs in
the job market. In today's job market, though, yesterday's
computer skills won't pay off. You'll be wise to know the
difference between *Java* and *Javascript*, why *virtual private
networks (VPN)* are replacing *leased lines*, and whether
ActiveX or *JavaBeans* represents the best choice for adding
active content to a Web page.
- Currently, the Internet is available in an estimated 50 per-
cent of U.S. households. A major impetus is electronic
mail, which is increasingly a favorite method of staying in
touch. Unless you want to be left in the dark, you'll be
wise to know what people are talking about when they
begin that litany of acronyms: *S/MIME*, *POP*, *IMAP*,
X.509, *LDAP*, and many more.
- Buying a computer is your ticket to better performance in
school and a better job after graduation. If you're thinking
about purchasing a computer, or upgrading an existing
one, you'll need to choose between such obscure things as
EDO RAM and *SDRAM*, a *G4* and a *Pentium III*, and—if
you want an *SCSI* device—whether you need *Fast SCSI*,
Wide SCSI, or *Ultra Wide SCSI*. If your head's spinning,
welcome to the club.

This book can help. Offering thousands of definitions in every
area of computer and Internet technology, this book defines
terms in clear, plain English. What's more, it goes beyond merely
defining the terms; you'll find additional background informa-
tion that will prove invaluable in understanding *why* a particular
term is important and *how* it relates to others. For example, the

sequence control structure A control structure that tells the computer to execute program statements in the order in which the statements were written. One of three fundamental control structures that govern the order in which program statements are executed, the sequence control structure is the default in all programming languages. You can use loops and branch control structures to alter the sequence.

sequential access An information storage and retrieval technique in which the computer must move through a sequence of stored data items to reach the desired one. Sequential access media, such as cassette tapes, are much slower than random access media, such as hard disk drives.

serial See *asynchronous communication, multitasking, parallel port, serial communication, and serial port.*

serial communication A type of electronic communication that, unlike parallel communication, requires that data bits be sent one after the other rather than several at once. Modems rely on serial communication to send data over telephone lines. See *serial port.*

Serial Line Internet Protocol See *SLIP.*

serial mouse A mouse designed to be connected directly to one of the computer's serial ports. See *bus mouse.*

serial port A port that synchronizes and manages asynchronous communication between the computer and devices such as serial printers, modems, and other computers. The serial port not only sends and receives asynchronous data in a one-bit-after-the-other stream, but it also negotiates with the receiving device to ensure that no data is lost when it is sent or received. The negotiation occurs through hardware or software handshaking. See *FiveWire, RS-232C, and Universal Asynchronous Receiver/Transmitter.*

serial printer A printer designed to be connected to a computer's serial port. Due to the inherent difficulty of configuring serial printers, most printers are now designed to use the computer's parallel port.

serif The fine, ornamental cross strokes across the ends of the main strokes of a character. Serif fonts are easier to read for body

type, but most designers prefer to use sans serif typefaces for display type. Compare with *sans serif.*

server 1. In a client/server network, a computer or program that is dedicated to providing information in response to external requests. See *file server and print server.* 2. On the Internet, a program that supplies information when it receives external requests via Internet connections. See *Web server.*

server application In object linking and embedding (OLE), the program that creates a source document. Data from a source document is linked or embedded in one or more destination documents created by client applications.

server-based application A network version of a program stored on a network's file server and available to more than one user at a time. See *client application.*

server-side include In an HTML document, a statement that tells the Web server to include information on the fly, such as the date of the file's last modification.

service bureau A business that provides a variety of publication services such as graphics file format conversion, optical scanning of graphics, and typesetting on high-resolution image setters such as Linotronics and Varitypes.

service provider See *ISP and Internet access provider (IAP).*

servo-controlled DC motor An electric motor used to turn the spindle of a hard disk. Unlike synchronous motors, servo-controlled DC motors are inexpensive and can operate at whatever speed the disk's designers want because the motor's rotation speed is independent of the frequency of the wall outlet's current.

servo-voice coil actuator The most popular kind of head actuator used in modern hard disks. Servo-voice coil actuators are closed-loop actuators that operate by using an electromagnet to pull the read/write head against tension created by a spring.

session layer In the OSI Reference Model of computer network architecture, the third of seven layers, in which a virtual connection is established with a corresponding service at the same layer on another computer. (The connection is virtual because the link to the destination computer at this level is only