

OVER
10,000
ENTRIES

Microsoft

Computer Dictionary

Fifth Edition

- Fully updated with the latest technologies, terms, and acronyms
- Easy to read, expertly illustrated
- Definitive coverage of hardware, software, the Internet, and more!



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

Copyright © 2002 by Microsoft Corporation

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

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.

1 2 3 4 5 6 7 8 9 QWT 7 6 5 4 3 2

Distributed in Canada by Penguin Books Canada Limited.

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.


Active Desktop, Active Directory, ActiveMovie, ActiveStore, ActiveSync, ActiveX, Authenticode, BackOffice, BizTalk, ClearType, Direct3D, DirectAnimation, DirectDraw, DirectInput, DirectMusic, DirectPlay, DirectShow, DirectSound, DirectX, Entourage, FoxPro, FrontPage, Hotmail, IntelliEye, IntelliMouse, IntelliSense, JScript, MapPoint, Microsoft, Microsoft Press, Mobile Explorer, MS-DOS, MSN, Music Central, NetMeeting, Outlook, PhotoDraw, PowerPoint, SharePoint, UltimateTV, Visio, Visual Basic, Visual C++, Visual FoxPro, Visual InterDev, Visual J++, Visual SourceSafe, Visual Studio, Win32, Win32s, Windows, Windows Media, Windows NT, Xbox are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other product and company names mentioned herein may be the trademarks of their respective owners.

The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted herein are fictitious. No association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred.

Acquisitions Editor: Alex Blanton

Project Editor: Sandra Haynes

Body Part No. X08-41929



Digitized by the Internet Archive
in 2022 with funding from
Kahle/Austin Foundation

Contents

<i>Introduction</i>	vii
<i>Changes in the Fifth Edition</i>	vii
<i>Order of Presentation</i>	vii
<i>Entries</i>	vii
<i>Future Printings and Editions</i>	ix

Dictionary of Computer Terms 1

Appendix A:

Common Character Sets	587
ANSI Character Set	587
Apple Macintosh Extended Character Set	593
IBM Extended Character Set	597
EBCDIC Character Set	599

Appendix B:

Common File Extensions	605
------------------------------	-----

Appendix C:

Instant Messaging Emoticons and Acronyms	613
--	-----

Appendix D:

Internet Domains	623
------------------------	-----

Appendix E:

Numeric Equivalents	631
---------------------------	-----

flush¹ *adj.* Aligned in a certain way on the screen or on paper. Flush left, for example, means aligned on the left side; flush right means aligned on the right side. *See also* align (definition 1).

flush² *vb.* To clear a portion of memory. For example, to flush a disk file buffer is to save its contents on disk and then clear the buffer for filling again.

flux *n.* 1. The total strength of a magnetic, electric, or radiation field over a given area. 2. A chemical used to aid the binding of solder to electrical conductors.

flux reversal *n.* The change in orientation of the minute magnetic particles on the surface of a disk or tape toward one of two magnetic poles. The two different alignments are used to represent binary 1 and binary 0 for data storage; a flux reversal typically represents a binary 1, and no reversal represents a binary 0.

fly swapping *n.* *See* swap-on-the-fly.

FM *n.* *See* frequency modulation.

FM encoding *n.* *See* frequency modulation encoding.

focus *vb.* In television and raster-scan displays, to make an electron beam converge at a single point on the inner surface of the screen.

FOCUS *n.* *See* Federation on Computing in the United States.

FOD *n.* *See* fax on demand.

folder *n.* In the Mac OS, 32-bit versions of Windows, and other operating systems, a container for programs and files in graphical user interfaces, symbolized on the screen by a graphical image (icon) of a file folder. This container is called a directory in other systems, such as MS-DOS and UNIX. A folder is a means of organizing programs and documents on a disk and can hold both files and additional folders. It first appeared commercially in Apple Computer's Lisa in 1983 and in the Apple Macintosh in 1984. *See also* directory.

folio *n.* A printed page number.

follow-up *n.* A post to a newsgroup that replies to an article. The follow-up has the same subject line as the original article, with the prefix "Re:" attached. An article and all of its follow-ups, in the order they were received, constitute a thread, which a user can read together using a newsreader.

font *n.* A set of characters of the same typeface (such as Garamond), style (such as italic), and weight (such as bold).

A font consists of all the characters available in a particular style and weight for a particular design; a typeface consists of the design itself. Fonts are used by computers for on-screen displays and by printers for hard-copy output. In both cases, the fonts are stored either as bit maps (patterns of dots) or as outlines (defined by a set of mathematical formulas). Even if the system cannot simulate different typefaces on the screen, application programs may be able to send information about typeface and style to a printer, which can then reproduce the font if a font description is available. *See also* bit map, font generator.

font card *n.* *See* font cartridge, ROM card.

font cartridge *n.* A plug-in unit available for some printers that contains fonts in several different styles and sizes. Font cartridges, like downloadable fonts, enable a printer to produce characters in sizes and styles other than those created by the fonts built into it. *Also called:* font card. *See also* ROM cartridge.

Font/DA Mover *n.* An application for older Apple Macintosh systems that allows the user to install screen fonts and desk accessories.

font editor *n.* A utility program that enables the user to modify existing fonts or to create and save new ones. Such an application commonly works with a screen representation of the font, with a representation that can be downloaded to a PostScript or other printer, or with both. *See also* PostScript font, screen font.

font family *n.* The set of available fonts representing variations of a single typeface. For example, Times Roman and Times Roman Italic are members of the same font family. When the user indicates italic, the system selects the correct italic font for the font family, with its characteristic appearance. If there is no italic font in the family, the system simply slants, or "obliques," the corresponding roman character. *See also* italic, roman.

font generator *n.* A program that transforms built-in character outlines into bit maps (patterns of dots) of the style and size required for a printed document. Font generators work by scaling a character outline to size; often they can also expand or compress the characters they generate. Some font generators store the resultant characters on disk; others send them directly to the printer.

font number *n.* The number by which an application or operating system internally identifies a given font. On the Apple Macintosh, for example, fonts can be identified by their exact names as well as their font numbers, and a font

recorded piano note, digitized and stored in memory, is used by the synthesizer to create other piano-like notes.

samurai *n.* A hacker employed by a company or organization to manage network security or conduct legal cracking operations. A samurai uses the skills of a hacker to meet the legitimate needs of an employer.

SAN *n.* See storage area network.

sandbox *n.* 1. Java Virtual Machine security area for downloaded (remote or untrusted) applets, an area in which such applets are confined and prevented from accessing system resources. Confinement to the sandbox prevents downloaded applets from carrying out potentially dangerous operations, maliciously or otherwise. They have to “play” inside the sandbox, and any attempt to “escape” is thwarted by the Java Security Manager.

2. Slang for the research and development department at many software and computer companies. See also applet, Java Virtual Machine.

sans serif *adj.* Literally, “without stroke”; describes any typeface in which the characters have no serifs (the short lines or ornaments at the upper and lower ends of the strokes). A sans serif typeface usually possesses a more straightforward, geometric appearance than a typeface with serifs and typically lacks the contrast between thick and thin strokes found in serif faces. Sans serif typefaces are used more frequently in display type, such as headlines, than in blocks of text. Compare serif¹.

SAOL *n.* Acronym for Structured Audio Orchestra Language. Part of the MPEG-4 standard, SAOL describes a set of tools for producing computer music, audio for computer games, streaming Internet sound or music, and other multimedia applications. SAOL is a flexible computer language for describing music synthesis and integrating synthetic sound with recorded sound in an MPEG-4 bit stream. See also bit stream, MPEG-4, streaming (definition 1).

SAP *n.* See Service Advertising Protocol.

SAPI *n.* Acronym for Speech Application Programming Interface. A feature in Windows 9x and Windows NT that allows applications to include speech recognition or convert text to speech. Also called: Speech API. See also voice recognition.

SAS *n.* See single attachment station.

SASL *n.* Acronym for Simple Authentication and Security Layer. An authentication support mechanism for use with connection-based protocols. SASL allows a client to request identification from a server and negotiate use of an added security layer for authentication during subsequent client/server interaction.

satellite *n.* See communications satellite.

satellite computer *n.* A computer that is connected to another computer, with which it interacts over a communications link. As its name indicates, a satellite computer is of lesser “stature” than the main, or host, computer; the host controls either the satellite itself or the tasks the satellite performs. See also remote communications.

satellite dish *n.* A parabolic (dish-shaped) reflector and antenna that is used for transmitting and receiving signals between the ground and earth satellites. Satellite dishes are commonly used for receiving television transmissions.

saturated mode *n.* The state in which a switching device or amplifier is passing the maximum possible current. A device is in saturated mode when increasing the control signal does not result in output of additional current.

saturation *n.* 1. In a switching device or amplifier, the fully conducting state. At saturation, the device is passing the maximum possible current. The term is most commonly used with reference to circuits containing bipolar or field-effect transistors. 2. In color graphics and printing, the amount of color in a specified hue, often specified as a percentage. See also HSB.

save *vb.* To write data (typically a file) to a storage medium, such as a disk or tape.

SAX *n.* Acronym for Simple API for XML. An event-driven application program interface (API) used to interpret an XML file. SAX works with an XML parser, providing an interface between the parser and an XML application. SAX is used as an alternative to the more complex object-based Document Object Model (DOM) interface. See also DOM.

scalability *n.* A measure of how well a computer, service, or application can grow to meet increasing performance demands. For server clusters, it is the ability to incrementally add one or more systems to an existing cluster when the overall load of the cluster exceeds its capabilities. See also server cluster.

S

symbolic address *n.* A memory address that can be referred to in a program by name rather than by number.

symbolic coding *n.* The expression of an algorithm in words, decimal numbers, and symbols rather than in binary numbers, so that a person can read and understand it. Symbolic coding is used in high-level programming languages. *See also* algorithm, high-level language.

symbolic language *n.* A computer language that uses symbols such as keywords, variables, and operators to form instructions. All computer languages except machine language are symbolic.

symbolic link *n.* A disk directory entry that takes the place of a directory entry for a file but is actually a reference to a file in a different directory. *Also called:* alias, shortcut, soft link, symlink.

symbolic logic *n.* A representation of the laws of reasoning, so named because symbols rather than natural-language expressions are used to state propositions and relationships. *See also* logic.

symbol set *n.* Any collection of symbols legitimized by a data-coding system, such as extended ASCII, or a programming language.

symbol table *n.* A list of all identifiers encountered when a program is compiled (or assembled), their locations in the program, and their attributes, such as variable, routine, and so on. *See also* compile, identifier, linker, module (definition 1), object code.

symlink *n.* *See* symbolic link.

symmetric digital subscriber line *n.* *See* SDSL.

symmetric multiprocessing *n.* *See* SMP.

symmetric multiprocessing server *n.* *See* SMP server.

SYN *n.* Short for **synchronous** idle character. A character used in synchronous (timed) communications that enables the sending and receiving devices to maintain the same timing. *Also called:* sync character.

sync character *n.* *See* SYN.

syncDRAM *n.* *See* SDRAM.

synchronization *n.* **1.** In networking, a communications transmission in which multibyte packets of data are sent and received at a fixed rate. *See also* packet (definition 1). **2.** In networking, the matching of timing between computers on the network. All of the computers are generally assigned identical times to facilitate and coordinate com-

munications. **3.** In a computer, the matching of timing between components of the computer so that all are coordinated. For instance, operations performed by the operating system are generally synchronized with the signals of the machine's internal clock. *See also* clock (definition 1), operating system. **4.** In application or database files, version comparisons of copies of the files to ensure they contain the same data. **5.** In multimedia, precise real-time processing. Audio and video are transmitted over a network in synchronization so that they can be played back together without delayed responses. *See also* real-time. **6.** In handheld computing, the process of updating or backing up the data on a handheld computer to the linked software applications on a desktop computer. Data changes made on the desktop computer may also be copied to the handheld during synchronization. *See also* partnership.

synchronization signal *n.* *See* sync signal.

synchronize *vb.* To cause to occur at the same time.

Synchronized Multimedia Integration Language *n.* *See* SMIL.

synchronous *adj.* Occurring at the same time. In computer transmissions, a reference to activity governed by a clock or by synchronized timing.

synchronous burst static RAM *n.* A type of static RAM that is synchronized with the system clock. Synchronous burst static RAM is used in a computer's L2 cache, where frequently accessed information is stored for fast retrieval by the CPU. Synchronous burst static RAM is faster than asynchronous static RAM but is limited to a maximum bus speed of 66 MHz. Computers running at faster speeds can use another form of cache memory known as pipeline burst static RAM. *Also called:* sync SRAM. *See also* L2 cache, static RAM. *Compare* asynchronous static RAM, dynamic RAM, pipeline burst static RAM.

synchronous communications *n.* Computer-to-computer communications in which transmissions are synchronized by timing between the sending and receiving machines.

Synchronous Data Link Control *n.* *See* SDLC.

Synchronous Digital Hierarchy *n.* An ITU recommendation implemented in Europe and similar in most respects to the SONET standard used in North America and Japan. *See also* SONET.

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!

Box & Dropbox Exhibit 1021

Page 8

Part No. X08-41956