Microsoft

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

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

Contributors

Peter Aiken
Bart Arenson
Janice Borzendowski
Jerome Colburn
Duane Hanson
Andrew Himes
Robert Howecton
Annette B. Jackson
Larry S. Jackson
Thomas A. Jackson
Chris Kinata
Ilana Kingsley
Robin Lombard
Thomas A. Long
William G. Madison
Thomas P. Magliery
David Mason
Terrence M. McLaren
Wallace Parker
Charles Petzold
Phil Rose
John Ross
David Rygmyr
Aimée Truchard
Michael Vose
Bruce Webster
Judson D. Weeks
Tom Winn
JoAnne Woodcock

Illustrators

Travis Beaven
David Holter
Alton Lawson
Rob Nance
Joel Panchot

Contents

NIC handle *n. See* handle.

nickel cadmium battery *n.* A rechargeable battery that uses an alkaline electrolyte. Nickel cadmium batteries typically have a longer operating life and storage life than similar lead-acid batteries. *Also called:* NiCad battery. *Compare* lead ion battery, lithium ion battery, nickel metal hydride battery.

nickel metal hydride battery *n.* A rechargeable battery that offers longer life and superior performance compared with similar nickel cadmium or other alkaline batteries. *Also called:* NiMH battery. *Compare* lead ion battery, lithium ion battery, nickel cadmium battery.

nickname *n.* A name used in the destination field of an e-mail editor in place of one or more complete network addresses. For example "Fred" might be a nickname for fred@history.washington.edu. If the nickname has been established within the program, a user need only type "Fred" instead of the entire address, or perhaps "history faculty" instead of all the individual faculty addresses. *See also* alias (definition 2).

NIDS *n.* Acronym for **n**etwork-based **i**ntrusion-**d**etection **S**ystem. A type of intrusion detection system (IDS) that analyzes the individual packets moving across a network. NIDS can detect packets that a firewall might not catch. *See also* IDS.

N

NII *n. See* National Information Infrastructure.

nil pointer *n. See* null pointer.

Nimda worm *n.* A persistent worm that can slow or freeze mail servers, take control of Web pages, and infect systems through several different means. The Nimda worm spreads as an attached file through e-mail, through an Internet scan for vulnerable Web servers, through a JavaScript on an infected Web page, or through network sharing. The Nimda worm first appeared in 2001, with several variants following the original version.

NiMH battery *n. See* nickel metal hydride battery.

nine's complement *n.* A number in the base-10 (decimal) system that is the complement of another number. It is derived by subtracting each digit of the number to be complemented from 1 less than the base. For example, the nine's complement of 64 is 35—the number derived by subtracting 6 from 9 and 4 from 9. *See also* complement.

NIS *n.* Acronym for **N**etwork **I**nformation **S**ervice. *See* Yellow Pages (definition 1).

NIST *n. See* National Institute of Standards and Technology.

***NIX** *n.* Slang for any UNIX-related operating system, or all UNIX-related operating systems. *NIX typically refers to UNIX and Linux, and may also include Mac OS X.

nixpub *n.* A list of ISPs (Internet service providers) available in the newsgroups comp.bbs.misc and alt.bbs. *See also* ISP.

NKE *n.* Acronym for **N**etwork **K**ernel **E**xtension. A modification or extension of the Mac OS X networking infrastructure. NKEs may be loaded or unloaded dynamically, without recompiling the kernel or without the need to reboot the system. NKEs allow the creation and configuration of protocol stacks and modules that may monitor or modify network traffic or add other networking features to the kernel.

NL *n. See* newline character.

NLQ *n. See* near-letter-quality.

NLS *n. See* natural language support.

NMI *n. See* nonmaskable interrupt.

NMOS or **N-MOS** *n.* Acronym for **N**-channel **m**etal-**o**xide **s**emiconductor. A semiconductor technology in which the conduction channel in MOSFETs is formed by the movement of electrons rather than holes (electron "vacancies" created as electrons move from atom to atom). Because electrons move faster than holes, NMOS is faster than PMOS, although it is more difficult and more expensive to fabricate. *See also* MOS, MOSFET, N-type semiconductor. *Compare* CMOS, PMOS.

NNTP *n.* Acronym for **N**etwork **N**ews **T**ransfer **P**rotocol. A de facto protocol standard on the Internet used to distribute news articles and query news servers.

NOC *n. See* network operation center.

node *n.* **1.** A junction of some type. **2.** In networking, a device, such as a client computer, a server, or a shared printer, that is connected to the network and is capable of communicating with other network devices. **3.** In tree structures, a location on the tree that can have links to one or more nodes below it. Some authors make a distinction between node and element, with an element being a given data type and a node comprising one or more elements as well as any supporting data structures. *See also* element (definition 1), graph, pointer (definition 1), queue, stack, tree.

dedicated to that data, and it cannot be reprogrammed. *See also* EEPROM, EPROM, ROM (definition 2).

PROM blaster *n. See* PROM programmer.

PROM blower *n. See* PROM programmer.

promiscuous-mode transfer *n.* In network communications, a transfer of data in which a node accepts all packets regardless of their destination address.

PROM programmer *n.* A hardware device that records instructions or data on a PROM (programmable read-only memory) chip or an EPROM (erasable programmable read-only memory) chip. *Also called:* PROM blaster, PROM blower. *See also* EPROM, PROM.

prompt *n.* **1.** In command-driven systems, one or more symbols that indicate where users are to enter commands. For instance, in MS-DOS, the prompt is generally a drive letter followed by a greater than symbol (C>). In UNIX, it is usually %. *See also* command-driven system, DOS prompt. **2.** Displayed text indicating that a computer program is waiting for input from the user.

propagated error *n.* An error used as input to another operation, thus producing another error.

propagation *n.* Travel of a signal, such as an Internet packet, from its source to one or more destinations. Propagation of messages over different paths with different lengths can cause messages to appear at a user's computer with varying delivery times. *See also* propagation delay.

propagation delay *n.* The time needed by a communications signal to travel between two points; in satellite links, a noticeable delay of between one-quarter second and one-half second, caused by the signal traveling through space.

propeller head *n.* Slang for a person who is obsessed with computers or other technology; a geek. The name refers to a child's beanie cap topped by a spinning propeller.

property *n.* In Windows 9x, a characteristic or parameter of an object or device. Properties of a file, for example, include type, size, and creation date and can be identified by accessing the file's property sheet. *See also* property sheet.

property sheet *n.* A type of dialog box in Windows 9x, accessed by choosing Properties in the File menu or by right-clicking on an object and selecting Properties, that lists the attributes or settings of an object such as a file, application, or hardware device. A property sheet presents the user with a tabbed, index-card-like selection of property pages, each of which features standard dialog-style controls for customizing parameters.

proportional font *n.* A set of characters in a particular style and size in which a variable amount of horizontal space is allotted to each letter or number. In a proportional font, the letter *i*, for example, is allowed less space than the letter *m*. *Compare* monospace font.

proportional spacing *n.* A form of character spacing in which the horizontal space each character occupies is proportional to the width of the character. The letter *w*, for example, takes up more space than the letter *i*. *Compare* monospacing.

proprietary *adj.* Of, pertaining to, or characteristic of something that is privately owned. Generally, the term refers to technology that has been developed by a particular corporation or entity, with specifications that are considered by the owner to be trade secrets. Proprietary technology may be legally used only by a person or entity purchasing an explicit license. Also, other companies are unable to duplicate the technology, both legally and because its specifications have not been divulged by the owner. *Compare* public domain.

proprietary software *n.* A program owned or copyrighted by an individual or a business and available for use only through purchase or by permission of the owner. *Compare* open source, public-domain software.

protected *n.* A keyword in a programming language (such as Java or C++) used in a method or variable declaration. It signifies that the method or variable can be accessed only by elements residing in its class, subclasses, or classes in the same package. *See also* class, declaration, method, package, variable.

protected mode *n.* An operating mode of the Intel 80286 and higher microprocessors that supports larger address spaces and more advanced features than real mode. When started in protected mode, these CPUs provide hardware support for multitasking, data security, and virtual memory. The Windows (version 3.0 and later) and OS/2 operating systems run in protected mode, as do most versions of UNIX for these microprocessors. *Compare* real mode.

protocol *n. See* communications protocol.

protocol analyzer *n.* A management tool designed to identify and diagnose computer network problems. A protocol analyzer looks at LAN (local area network) or WAN (wide area network) traffic and finds protocol errors, connection delays, and other network faults. The protocol