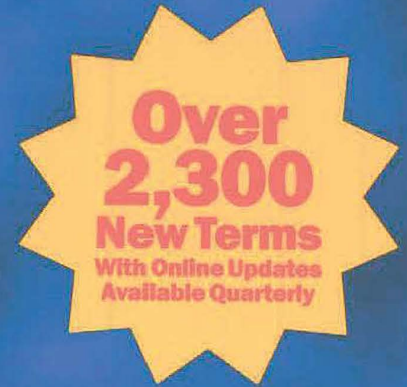




The Ultimate Computer Reference

*The Comprehensive Standard for Business,
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Microsoft Press[®] **Computer Dictionary** Third Edition

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Microsoft Press

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Computer Dictionary

Third Edition

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

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Library of Congress Cataloging-in-Publication Data pending.

ISBN 1-57231-743-4

Printed and bound in the United States of America.

1 2 3 4 5 6 7 8 9 QMQM 2 1 0 9 8 7

Distributed to the book trade in Canada by Macmillan of Canada, a division of Canada Publishing Corporation.

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

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desktop enhancer

desktop enhancer \desk'top en-han'sər\ *n.* Software that adds functionality to a windows-based operating system such as Microsoft Windows or Mac OS—for example, an enhanced file browser, clipboard, or multimedia player.

Desktop file \desk'top fil'\ *n.* A hidden file maintained on a particular volume (roughly equivalent to a disk) by the Macintosh operating system for storing information about the files on it, such as version data, lists of icons, and file references.

Desktop Management Interface \desk'top man'əj-mənt in'tər-fās\ *n.* See DMI.

desktop publishing \desk'top pu'bli-shēng\ *n.* The use of a computer and specialized software to combine text and graphics to create a document that can be printed on either a laser printer or a typesetting machine. Desktop publishing is a multiple-step process involving various types of software and equipment. The original text and illustrations are generally produced with software such as word processors and drawing and painting programs and with photograph-scanning equipment and digitizers. The finished product is then transferred to a page-makeup program, which is the software most people think of as the actual desktop publishing software. This type of program enables the user to lay out text and graphics on the screen and see what the results will be; for refining parts of the document, these programs often include word processing and graphics features in addition to layout capabilities. As a final step, the finished document is printed either on a laser printer or, for the best quality, by typesetting equipment.

desktop video \desk'top vid'ē-ō\ *n.* The use of a personal computer to display video images. The video images may be recorded on video tape or on a laser disc or may be live footage from a video camera. Live video images can be transmitted in digital form over a network in video conferencing.
Acronym: DTV (D'T-V).

destination \de'stə-nā'shən\ *n.* The location (drive, folder, or directory) to which a file is copied or moved. *Compare* source (definition 1).

destructive read \dis-truk'tiv rēd'\ *n.* An attribute of certain memory systems, notably core systems. In a destructive read of a memory location, the data is passed on to the processor, but the copy in

device controller

memory is destroyed by the process of reading. Destructive memory systems require special logic to rewrite data back to a memory location after it is read. *Also called* destructive readout. *See also* core. *Compare* nondestructive readout.

detail file \dē'tāl fil'\ *n.* *See* transaction file.

detection \də-tek'shən'\ *n.* Discovery of a certain condition that affects a computer system or the data with which it works.

determinant \də-tər'mə-nənt'\ *n.* In database design theory, any attribute or combination of attributes on which any other attribute or combination of attributes is functionally dependent.

determinism \də-tər'mə-ni-zəm'\ *n.* In computing, the ability to predict an outcome or to know in advance how data will be manipulated by a processing system. A deterministic simulation, for example, is one in which a certain input always produces the same output.

developer's toolkit \də-vel'ə-pərz tōōl'kit\ *n.* A set of routines (usually in one or more libraries) designed to allow developers to more easily write programs for a given computer, operating system, or user interface. *See also* library (definition 1), toolbox.

development cycle \də-vel'əp-mənt sī'kl\ *n.* The process of application development from definition of requirements to finished product, including the following stages: analysis, design and prototyping, software coding and testing, and implementation.

device \də-vīs'\ *n.* A generic term for a computer subsystem. Printers, serial ports, and disk drives are often referred to as devices; such subsystems frequently require their own controlling software, called device drivers. *See also* device driver.

device address \də-vīs' a'dres, ə-dres'\ *n.* A location within the address space of a computer's random access memory (RAM) that can be altered either by the microprocessor or by an external device. Device addresses are different from other locations in RAM, which can be altered only by the microprocessor. *See also* device, input/output, RAM.

device control character \də-vīs' kən-trōl'kâr'ək-tər\ *n.* *See* control character.

device controller \də-vīs' kən-trō'lər\ *n.* *See* input/output controller.



MMX \M`M-X\ *n.* Short for **Multimedia Extensions**. An enhancement to the architecture of Intel Pentium processors that improves the performance of multimedia and communications applications.

.mn \dot`M-N\ *n.* On the Internet, the major geographic domain specifying that an address is located in Mongolia.

mnemonic \nē-mon`ik\ *n.* A word, rhyme, or other memory aid used to associate a complex or lengthy set of information with something that is simple and easy to remember. Mnemonics are widely used in computing. Programming languages other than machine language, for example, are known as *symbolic languages* because they use short mnemonics, such as *ADD* (for *addition*) and *def* (for *define*) to represent instructions and operations. Similarly, operating systems and applications based on typed commands use mnemonics to represent instructions to the program. MS-DOS, for example, uses *dir* (for *directory*) to request a list of files.

MNP10 \M`N-P-ten\ *n.* Short for **Microcom Networking Protocol, Class 10**. An industry-standard communication protocol used for modem connections over analog cellular telephone connections. The most recent version of MNP10 is MNP 10EC (EC stands for Enhanced Cellular). *See also* communications protocol.

.mn.us \dot`M-N`dot-U-S\ *n.* On the Internet, the major geographic domain specifying that an address is located in Minnesota, United States.

.mo \dot`M-O\ *n.* On the Internet, the major geographic domain specifying that an address is located in Macau.

mobile computing \mō`bəl kəm-pyōō`tēng\ *n.* The process of using a computer while traveling. Mobile computing usually requires a portable computer that is battery powered, rather than a desktop system.

mode \mōd\ *n.* The operational state of a computer or a program. For example, edit mode is the state in which a program accepts changes to a file. *See also* address mode, compatibility mode, safe mode, video mode, virtual real mode.

modem \mō`dek\ *n.* In telecommunications, a device that generates analog modem signals digitally. The term *modem* is a combination of the

terms *modem* and *codec*. *See also* codec (definition 1), modem.

model \mod`əl\ *n.* A mathematical or graphical representation of a real-world situation or object—for example, a mathematical model of the distribution of matter in the universe, a spreadsheet (numeric) model of business operations, or a graphical model of a molecule. Models can generally be changed or manipulated so that their creators can see how the real version might be affected by modifications or varying conditions. *See also* modeling, simulation.

modeling \mod`əl-ēng\ *n.* **1.** The use of computers to describe the behavior of a system. Spreadsheet programs, for example, can be used to manipulate financial data, representing the health and activity of a company; to develop business plans and projections; or to evaluate the impact of proposed changes on the company's operations and financial status. *See also* simulation, spreadsheet program. **2.** The use of computers to describe physical objects and the spatial relationships among them mathematically. CAD programs, for example, are used to create on-screen representations of such physical objects as tools, office buildings, complex molecules, and automobiles. These models use equations to create lines, curves, and other shapes and to place those shapes accurately in relation to each other and to the two-dimensional or three-dimensional space in which they are drawn. *See also* CAD, rendering, solid model, surface modeling, three-dimensional model, two-dimensional model, wire-frame model.

modem \mō`dəm\ *n.* Short for **modulator/demodulator**. A communications device that enables a computer to transmit information over a standard telephone line. Because a computer is digital (works with discrete electrical signals representing binary 1 and binary 0) and a telephone line is analog (carries a signal that can have any of a large number of variations), modems are needed to convert digital to analog and vice versa. When transmitting, modems impose (modulate) a computer's digital signals onto a continuous carrier frequency on the telephone line. When receiving, modems sift out (demodulate) the information from the carrier and transfer it in digital form to the

computer. Sophisticated modems are also capable of such functions as automatic dialing, answering, and redialing in addition to transmitting and receiving. Without appropriate communications software, however, modems cannot perform any useful work. *See also* baud rate.

modem bank \mō'dəm bank\ *n.* A collection of modems connected to a server maintained by an ISP or the operator of a BBS or remote-access LAN. Most modem banks are configured to allow a remote user to dial a single phone number that routes calls to an available phone number on the bank. *See also* BBS (definition 1), ISP, LAN.

modem eliminator \mō'dəm i-lim'ə-nā-tər\ *n.* A device that enables two computers to communicate without modems. *See also* null modem.

modem port \mō'dəm pōrt\ *n.* A serial port used for connecting an external modem to a personal computer. *See also* modem, serial port.

modem ready \mō'dəm red'ē\ *n.* *See* MR.

moderated \mod'ər-ā'təd\ *adj.* Subjected to review by a moderator, who may remove irrelevant or inflammatory articles or messages before redistributing them through a newsgroup, mailing list, or other messaging system.

moderated discussion \mod'ər-āt-əd di-skush'ən\ *n.* Communication taking place on a mailing list, newsgroup, or other online forum that is edited by a moderator. When one submits a message to a moderated discussion, the moderator decides if the message is relevant to the discussion topic. If so, it is forwarded to the discussion group. The content of a moderated discussion is often perceived as more valuable than that of an unmoderated one because the information has been read and approved by a "gatekeeper," who has (presumably) filtered out irrelevant submissions. Some moderators also filter submissions for obscene or pornographic material or material that is potentially offensive. *See also* mailing list, moderator, newsgroup.

moderator \mod'ər-ā'tər\ *n.* In some Internet newsgroups and mailing lists, a person through whom all messages are filtered before they are distributed to the members of the newsgroup or list. The moderator discards or edits any messages that are not considered appropriate. *See also* mailing list, newsgroup.

modified frequency modulation encoding

\mod'ə-fīd frē'kwən-sē mōj'ə-lā'shən en-kō'dēng, mō'dyā-lā'shən\ *n.* Abbreviated MFM encoding. A widely used method of storing data on disks. MFM encoding is based on an earlier technique called frequency modulation encoding but improves on its efficiency by reducing the need for synchronizing information and by basing the magnetic coding of each bit on the status of the previously recorded bit. MFM encoding stores more information on a disk than does frequency modulation encoding and is used on many hard disks. It is not, however, as efficient a space saver as the technique known as *run-length limited encoding*, or RLL. *Compare* frequency modulation encoding, run-length limited encoding.

modifier key \mod'ə-fī-ər kē\ *n.* A key on the keyboard that, when held down while another key is pressed, changes the meaning of the keystroke. *See also* Alt key, Command key, Control key, Shift key.

modify structure \mod'ə-fī struk'chur\ *n.* An operator available in some database management systems that permits fields (columns) to be added or deleted without the need to rebuild the entire database.

MO disk \M-O' disk\ *n.* *See* magneto-optic disc.

MO disk drive \M-O' disk' drīv\ *n.* *See* magneto-optic disc.

Modula-2 \mōj'ə-lə-tōō', mō'dyā-lə\ *n.* A modular high-level language designed in 1980 by Niklaus Wirth. Derived from Pascal, Modula-2 is noted for its emphasis on modular programming, its early support for data abstraction, and its lack of standard functions and procedures. *See also* modular programming.

modular design \mōj'ə-lər də-zīn', mō'dyā-lər\ *n.* An approach to designing hardware or software. In modular design, a project is broken into smaller units, or modules, each of which can be developed, tested, and finished independently before being combined with the others in the final product. Each unit is designed to perform a particular task or function and can thus become part of a "library" of modules that can often be reused in other products having similar requirements. In programming, for example, one module might consist of instructions for moving the cursor in a