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Computer Dictionary

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tive Executive. A developed and stations and PCs.

**alarm** n. A visual or auditory signal from a computer alerting the user to an error or a hazardous situation.

ALB n. See load balancing.

alert n. 1. In many operating systems with GUIs (graphical user interfaces), an audible or visual alarm that signals an error or represents a warning of some sort. See also alert box. 2. In programming, an asynchronous notification sent by one thread to another. The alert interrupts the recipient thread at defined points in its execution and causes it to execute an asynchronous procedure call. See also asynchronous procedure call, thread (definition 1).

alert box n. An on-screen box in a GUI (graphical user interface) that is used to deliver a message or warning. Compare dialog box.

Alerter service n. A service used by the server and other services to notify selected users and computers of administrative alerts that occur on a computer. The Alerter service requires the Messenger service. See also administrative alerts, Messenger service, service.

**ALGOL** *n*. Acronym for **Algorithmic** Language. The first structured procedural programming language, developed in the late 1950s and once widely used in Europe.

algorithm n. A finite sequence of steps for solving a logical or mathematical problem or performing a task.

algorithmic language n. A programming language, such as Ada, Basic, C, or Pascal, that uses algorithms for problem solving.

Algorithmic Language n. See ALGOL.

alias n. 1. An alternative label for some object, such as a file or data collection. 2. A name used to direct e-mail messages to a person or group of people on a network.

3. A false signal that results from the digitization of an analog audio sample.

aliasing n. In computer graphics, the jagged appearance of curves or diagonal lines on a display screen, which is caused by low screen resolution. See the illustration.



Allasing. The lower resolution of the image on the right teveals the aliasing effect.

**aliasing bug** n. A class of subtle programming errors that can arise in code that performs dynamic allocation. If sev-

eral pointers address the same chunk of storage, the program may free the storage using one of the pointers but then attempt to use another one (an alias), which would no longer be pointing to the desired data. This bug is avoidable by the use of allocation strategies that never use more than one copy of a pointer to allocated core memory, or by the use of higher-level languages, such as LISP, which employ a garbage collection feature. Also called: stale pointer bug. See also alias, dynamic allocation, garbage collection.

align vb. 1. In an application such as a word processor, to position lines of type relative to some point, such as the page margin. The most common types of alignment are left- and right-aligned and centered. See the illustration.

2. To adjust some device to position it within specified tolerances, such as the read/write head relative to a track on a disk. 3. In data handling, to store multiple-byte data units so that the respective bytes fall in corresponding locations of memory.

Left aligned to the left edge Center centered around a midpoint

**Right** aligned to the right edge **Decimal** 999 10,99 100,999 10,999

Align.

**alignment** *n*. The arrangement of objects in fixed or predetermined positions, rows, or columns. For example, the Macintosh Finder can do automatic alignment of icons in a folder or on the desktop.

**Allegro** *n*. Ported to a number of operating systems, Allegro is a freeware library of functions for use in programming computer games and graphics programs. It is written for the DJGPP compiler in a mixture of C and assembly language. The most recent release version is 4.0.0. *See also* assembly language, DJGPP.

allocate vb. To reserve a resource, such as sufficient memory, for use by a program. Compare deallocate.

**allocation** *n*. In operating systems, the process of reserving memory for use by a program.

surfaces. Because the markings permit an electric current to flow, a set of conductive brushes that ride on the surface of the conductive wheels can detect these conductive markings. The electronics in the mouse translate these electrical movement signals into mouse-movement information that can be used by the computer. See also mouse, trackball. Compare optical mouse, optomechanical mouse.

**mechatronics** n. A term derived from the words mechanical and electronics to describe a field of engineering that applies mechanical, electrical, and electronic engineering concepts to product design and manufacture. A relatively new discipline, mechatronics is applicable to products in fields as diverse as medicine, robotics, manufacturing, and consumer electronics.

**media** n. The physical material, such as paper, disk, and tape, used for storing computer-based information. *Media* is plural; *medium* is singular.

Media Access Control n. See MAC.

Media Control Interface n. See MCI (definition 1).

**media conversion** n. Transferring data from one storage medium to another—for example, from disk to tape.

**media eraser** n. A device that removes or obliterates data from a storage medium on a wholesale basis, usually by writing meaningless data (such as zeros) over it. See also bulk eraser.

media filter n. 1. A device used with local area networks (LANs) as an adapter between two different types of media. For example, an RJ-45 connector might be used between coaxial cable and unshielded twisted pair (UTP) cables. Media filters are similar in function to transceivers. As with many components to LANs, manufacturers often choose different names for similar products, so a LAN expert is needed to decide which media filters are required for a particular LAN. See also coaxial cable, connector (definition 1), LAN, transceiver, UTP. 2. A device added to data networks to filter out electronic noise from the environment. For example, a media filter might be added to an Ethernet network based on coaxial cabling to prevent data loss from interference by nearby electronic equipment. See also coaxial cable, Ethernet (definition 1).

**media stream** n. A continuous sequence of audio or audio-and-video through a network.

**medium<sup>1</sup>** adj. Of or relating to the middle part of a range of possible values.

**medium<sup>2</sup>** n. A substance in which signals can be transmitted, such as a wire or fiber-optic cable. See media.

**medium model** n. A memory model of the Intel 80x86 processor family. The medium model allows only 64 kilobytes for data but generally up to 1 megabyte for code. See also memory model.

medium-scale integration n. A concentration of circuit elements in the hundreds on a single chip. Acronym: MSI See also integrated circuit.

meg n. See megabyte.

**mega-** prefix One million (10<sup>6</sup>). In computing, which is based on the binary (base-2) numbering system, mega- has a literal value of 1,048,576, which is the power of 2 (2<sup>20</sup>) closest to one million. Abbreviation: M.

**megabit** n. Usually 1,048,576 bits ( $2^{20}$ ); sometimes interpreted as 1 million bits. Abbreviation: Mb, Mbit.

**megabyte** n. Usually 1,048,576 bytes ( $2^{20}$ ); sometimes interpreted as 1 million bytes. *Abbreviation*: MB.

**megacycle** n. A term for 1 million cycles—usually used to mean 1 million cycles per second. Abbreviation: MC. See also megahertz.

megaflops n. See MFLOPS.

megahertz n. A measure of frequency equivalent to 1 million cycles per second. Abbreviation: MHz.

megapel display n. See megapixel display.

**megapixel** adj. A reference to image resolution of one million pixels or more. The term is used in reference to devices such as digital cameras, scanners, and computer monitors and display adapters.

megapixel display n. A video display capable of displaying at least 1 million pixels. For example, a video display with a screen size of 1024 horizontal pixels and 1024 vertical pixels is a megapixel display. Also called: megapel display.

Melissa n. A macro virus that affects Word files in Microsoft Office 97 and Office 2000 and first appeared in the spring of 1999. Melissa is delivered as an attachment to an e-mail with the subject line "An Important Message From <user name>," a message beginning "Here is that document you asked for...," or both. When the attachment is opened, the virus propagates (if Microsoft Outlook is installed) by sending itself to the first 50 e-mail addresses in the user's Outlook address book. On the infected machine,

