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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.



Aliasing. The lower resolution of the image on the right reveals the aliasing effect.

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

MDA *n.* Acronym for **M**onochrome **D**isplay **A**dapter. The video adapter introduced with the earliest model of the IBM PC in 1981. MDA was capable of only one video mode: a character mode with 25 lines of 80 characters each, with underlining, blinking, and high-intensity characters. IBM did not use the name *Monochrome Display Adapter* or the acronym *MDA*.

MDI *n.* Acronym for **m**ultiple-**d**ocument interface. A user interface in an application that allows the user to have more than one document open at the same time. *See also* user interface.

MDIS *n.* *See* Metadata Interchange Specification.

mean time between failures *n.* *See* MTBF.

mean time to repair *n.* *See* MTTR.

mechanical mouse *n.* A type of mouse in which the motion of a ball on the bottom of the mouse is translated into directional signals. As the user moves the mouse, the ball rolls, turning a pair of wheels mounted at right angles inside the mouse that have conductive markings on their 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.

medium¹ *adj.* Of or relating to the middle part of a range of possible values.

medium² *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.