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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!



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Introduction

The *Microsoft Computer Dictionary, Fifth Edition* is designed to be a comprehensive and authoritative source of definitions for computer-related terms and abbreviations. The dictionary includes terms drawn from a wide variety of topics relevant to computer users, including software, hardware, networking, data storage, graphics, games, information processing, the Internet and the World Wide Web, gaming, history, jargon and slang, organizations, programming, and standards.

Although this book covers nearly every aspect of computing, it does not include entries on most companies or on most makes and models of computers, nor does it contain entries on most application software products. The few exceptions to this rule of thumb are key companies and products that have a historical or universal importance within the computing industry.

This dictionary emphasizes terminology that the average computer user will encounter in documentation, online help, computer manuals, marketing and sales materials, the popular media, and the computer trade press. Because most computer users operate personal computers and desktop systems at home, work, or both, the majority of the entries in this dictionary cover the terminology used in describing and working with these systems. However, some specialized or highly technical language is included that pertains to areas of industry, academia, software and hardware development, and research. These terms have been included because they have a bearing on more common computer terminology or because they are of historical significance.

Changes in the Fifth Edition

The fifth edition of the *Microsoft Computer Dictionary* has been revised and expanded to include over 10,000 entries, reflecting the many advances in the computer field and

including several areas that have come into prominence in the public eye, such as networking, Web authoring, and new technologies, such as .NET. The content from the Year 2000 appendix has been integrated into the body of the dictionary and a new appendix on emoticons and instant messaging symbols has been added.

Order of Presentation

Entries are alphabetized by letter. Spaces are ignored, as are characters such as hyphens and slashes; for example, *Baud-dot code* falls between *baud* and *baud rate*, and *machine-independent* falls between *machine identification* and *machine instruction*. Numbers and symbols are located at the beginning of the book and are listed in ascending ASCII order. If an entry begins with a letter or letters but contains a number, it is listed alphabetically, according to the initial letter(s), and then according to ASCII order. Thus, V20 precedes V.2x, and both precede VAB.

Entries

Entries are of two types: main entries, which contain full definitions, and synonymous cross-references, which contain *See* references to the appropriate main entries. Synonymous cross-references are generally secondary or less common ways of referring to a main entry. The definition at the main entry can be substituted as a definition for the synonymous cross-reference.

Format

Information in each main entry is presented in a consistent format: entry name in boldface, spelling variants (if any), part of speech, definition, illustration or table reference (if any), acronym (if any), alternative names (if any), and cross-references (if any).

Main Entries

Entries that are acronyms or abbreviations for one or more words or concatenations of two or more words have those words spelled out at the beginning of the definition. The letters in these words or phrases that make up the acronym, abbreviation, or concatenation are in boldface.

When a main entry is spelled exactly the same as another main entry, the two entries are differentiated by the use of a superscript numeral after each term. These entries are called homographs, and they are generally different parts of speech. For example,

e-mail¹ (*noun*)

e-mail² (*verb*)

Spelling Variants

When a main entry has one or more variations in the way it is spelled, each spelling variant follows the main entry, after the word *or*.

Parts of Speech

Entries are broken down into four parts of speech, in addition to prefixes, abbreviated as follows:

n. noun

vb. verb

adj. adjective

adv. adverb

Definitions

Each of the more than 10,000 entries is written in clear, standard English. Many go beyond a simple definition to provide additional detail and to put the term in context for a typical computer user. When an entry has more than one sense or definition, the definitions are presented in a numbered list, to make it easier to distinguish the particular, sometimes subtle, variations in meaning.

Illustration and Table References

Some entries have affiliated illustrations or tables that aid in defining the entry. In most cases, illustrations and tables appear on the same page as the entries to which they apply.

In some instances, however, page layout requirements have forced them to a subsequent page. Entries with illustrations or tables usually have references at the end of the definition for an entry, in the following formats:

See the illustration.

See the table.

Acronyms

Some terminology in the computer field, particularly computer standards and Internet slang, can be shortened to form acronyms. Sometimes the acronym is the more common way to refer to the concept or object; in these cases, the acronym is the main entry. In other cases, the acronym is not as commonly used as the words or phrase for which it stands. In these cases, the words or phrase constitute the main entry. The acronym is given after the definition for these entries in the following format:

Acronym:

Alternative Names

Some items or concepts in the computer field can be referred to by more than one name. Generally, though, one way is preferred. The preferred terminology is the main entry. Alternative names are listed after any acronyms; otherwise they are listed after the definition in the following format:

Also called:

Cross-References

Cross-references are of three types: *See*, *See also*, and *Compare*. A *See* reference is used in an entry that is a synonymous cross-reference and simply points to another entry that contains the information sought. A *See also* reference points to one or more entries that contain additional or supplemental information about a topic and follows any acronyms or alternative names after the definition. A *Compare* reference points to an entry or entries that offer contrast and follows any *See also* references; otherwise it follows any acronyms or alternative names after the definition.

parallel server *n.* A computer system that implements some form of parallel processing to improve its performance as a server. *See also* SMP server.

parallel transmission *n.* The simultaneous transmission of a group of bits over separate wires. With microcomputers, parallel transmission refers to the transmission of 1 byte (8 bits). The standard connection for parallel transmission is known as the Centronics interface. *See also* Centronics parallel interface. *Compare* serial transmission.

parameter *n.* In programming, a value that is given to a variable, either at the beginning of an operation or before an expression is evaluated by a program. Until the operation is completed, a parameter is effectively treated as a constant value by the program. A parameter can be text, a number, or an argument name assigned to a value that is passed from one routine to another. Parameters are used as a means of customizing program operation. *See also* argument, pass by address, pass by value, routine.

parameter-driven *adj.* Of, pertaining to, or being a program or an operation whose character or outcome is determined by the values of the parameters that are assigned to it.

parameter passing *n.* In programming, the substitution of an actual parameter value for a formal parameter when a procedure or function call is processed.

parameter RAM *n.* A few bytes of battery-backed CMOS RAM on the motherboards of Apple Macintosh computers. Information about the configuration of the system is stored in parameter RAM. *Acronym:* PRAM. *See also* CMOS RAM. *Compare* CMOS (definition 2).

PARC *n.* *See* Xerox PARC.

parent/child *adj.* **1.** Pertaining to or constituting a relationship between processes in a multitasking environment in which the parent process calls the child process and most often suspends its own operation until the child process aborts or is completed. **2.** Pertaining to or constituting a relationship between nodes in a tree data structure in which the parent is one step closer to the root (that is, one level higher) than the child.

parity *n.* The quality of sameness or equivalence, in the case of computers usually referring to an error-checking procedure in which the number of 1s must always be the same—either even or odd—for each group of bits trans-

mitted without error. If parity is checked on a per-character basis, the method is called vertical redundancy checking, or VRC; if checked on a block-by-block basis, the method is called longitudinal redundancy checking, or LRC. In typical modem-to-modem communications, parity is one of the parameters that must be agreed upon by sending and receiving parties before transmission can take place. *See* the table. *See also* parity bit, parity check, parity error.

Table P.1 *Types of Parity.*

Type	Description
Even parity	The number of 1s in each successfully transmitted set of bits must be an even number.
Odd parity	The number of 1s in each successfully transmitted set of bits must be an odd number.
No parity	No parity bit is used.
Space parity	A parity bit is used and is always set to 0.
Mark parity	A parity bit is used and is always set to 1.

parity bit *n.* An extra bit used in checking for errors in groups of data bits transferred within or between computer systems. With PCs, the term is frequently encountered in modem-to-modem communications, in which a parity bit is often used to check the accuracy with which each character is transmitted, and in RAM, where a parity bit is often used to check the accuracy with which each byte is stored.

parity check *n.* The use of parity to check the accuracy of transmitted data. *See also* parity, parity bit.

parity error *n.* An error in parity that indicates an error in transmitted data or in data stored in memory. If a parity error occurs in communications, all or part of a message must be retransmitted; if a parity error occurs in RAM, the computer usually halts. *See also* parity, parity bit.

park *vb.* To position the read/write head over a portion of a disk that stores no data (and therefore can never be damaged) or beyond the surface of the disk, prior to shutting down the drive, especially in preparation for moving it. Parking can be performed manually, automatically, or by a disk utility program.

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transceiver *n.* Short for **transmitter/receiver**. A device that can both transmit and receive signals. On LANs (local area networks), a transceiver is the device that connects a computer to the network and that converts signals to and from parallel and serial form.

transceiver cable *n.* A cable that is used to connect a host adapter within a computer to a LAN (local area network). *See also* AUI cable, LAN.

transducer *n.* A device that converts one form of energy into another. Electronic transducers either convert electric energy to another form of energy or convert nonelectric to electric energy.

transfer¹ *n.* **1.** The movement of data from one location to another. **2.** The passing of program control from one portion of code to another.

transfer² *vb.* To move data from one place to another, especially within a single computer. *Compare* transmit.

transfer rate *n.* The rate at which a circuit or a communications channel transfers information from source to destination, as over a network or to and from a disk drive. Transfer rate is measured in units of information per unit of time—for example, bits per second or characters per second—and can be measured either as a raw rate, which is the maximum transfer speed, or as an average rate, which includes gaps between blocks of data as part of the transmission time.

transfer statement *n.* A statement in a programming language that transfers the flow of execution to another location in the program. *See also* branch instruction, CALL statement, GOTO statement, jump instruction.

transfer time *n.* The time elapsed between the start of a data transfer operation and its completion.

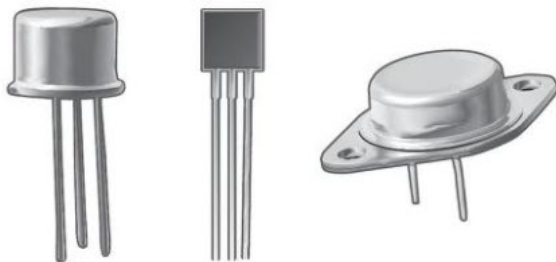
transform *vb.* **1.** To change the appearance or format of data without altering its content; that is, to encode information according to predefined rules. **2.** In mathematics and computer graphics, to alter the position, size, or nature of an object by moving it to another location (translation), making it larger or smaller (scaling), turning it (rotation), changing its description from one type of coordinate system to another, and so on.

transformer *n.* A device used to change the voltage of an alternating current signal or to change the impedance of an alternating current circuit.

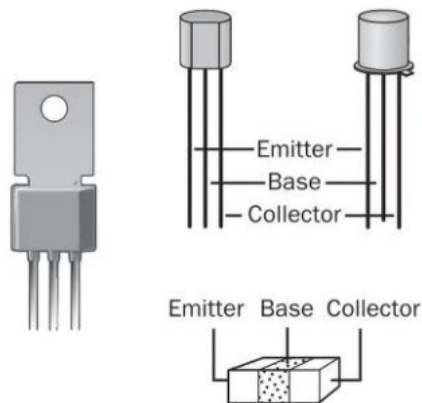
transient *adj.* **1.** Fleeting, temporary, or unpredictable. **2.** Of or pertaining to the region of memory used for programs, such as applications, that are read from disk storage and that reside in memory temporarily until they are replaced by other programs. In this context, *transient* can also refer to the programs themselves. **3.** In electronics, of or pertaining to a short-lived, abnormal, and unpredictable increase in power supply, such as a voltage spike or surge. *Transient time* is the interval during which a change in current or voltage is building up or decaying.

transient suppressor *n.* A circuit designed to reduce or eliminate unwanted electrical signals or voltages.

transistor *n.* Short for **transfer resistor**. A solid-state circuit component, usually with three leads, in which a voltage or a current controls the flow of another current. The transistor can serve many functions, including those of amplifier, switch, and oscillator, and is a fundamental component of almost all modern electronics. *See the illustration.* *See also* base (definition 3), FET, NPN transistor, PNP transistor.



Transistor.



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