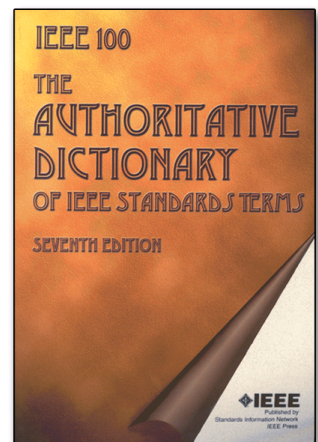


IEEE 100

The Authoritative Dictionary of IEEE Standards Terms

Seventh Edition



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realm *See:* area.

real number A member of the set of all positive and negative numbers, including integers, zero, mixed, fractional, rational, and irrational numbers. (C) 610.5-1990w, 1084-1986w

real storage (1) The main storage portion of a virtual storage system. *Contrast:* virtual storage. (C) 610.12-1990

(2) The main storage in a virtual storage system. *Note:* Although real storage and main storage are physically identical, conceptually real storage represents only parts of the range of addresses available to the user of a virtual storage system, whereas, the main storage includes the total range of addresses available to the user. (C) 610.10-1994w

real time (1) (processing) (emergency and standby power) Pertaining to the actual time during which a physical process transpires or pertaining to the performance of a computation during the actual time of related physical processing in order that results of the computation can be used in guiding the physical process. (IA/PSE) 446-1987s

(2) The actual time in the real world during which an event takes place. *Synonyms:* true time; actual time. (C) 610.10-1994w

(3) (analog computer) Using an ordinary clock as a time standard, the number of seconds measured between two events occurring in a physical system. By contrast, computer time is the number of seconds measured, with the same clock, between corresponding events in the simulated system. The ratio of the time interval between two events in a simulated system to the time interval between the corresponding events in the physical system is the time scale. Computer time is equal to the product of real time and the time scale. Real-time computation is computer operation in which the time scale is unity. Machine time is synonymous with computer time. *See also:* scale factor. (C) 165-1977w

(4) (software) Pertaining to a system or mode of operation in which computation is performed during the actual time that an external process occurs, in order that the computation results can be used to control, monitor, or respond in a timely manner to the external process. *Contrast:* batch. *See also:* conversational; interactive; online; interrupt. (C) 610.12-1990, 610.10-1994w

(5) (modeling and simulation) In modeling and simulation, simulated time with the property that a given period of actual time represents the same period of time in the system being modeled; for example, in a simulation of a radar system, running the simulation for one second may result in the model advancing time by one second; that is, simulated time advances at the same rate as actual time. *Contrast:* slow time; fast time. (C) 610.3-1989w

(6) An event or data transfer in which, unless accomplished within an allotted amount of time, the accomplishment of the action has either no value or diminishing value. (DIS/C) 1278.2-1995

(7) The real time, in seconds and fraction thereof, of acquisition of the spectrum. It is expressed as 14 characters including decimal point with leading zeros interpreted as zeros. (NPS/NID) 1214-1992r

real-time clock (RTC) (1) A device that signals the computer at regular intervals in order that it may keep up with some external event. *See also:* time-of-day clock. (C) 610.10-1994w

(2) A hardware system element that provides the system with a reference to real-world time. A common implementation would be a circuit containing a set of registers holding the current month, day, year, day-of-week number, and other time-related values, along with a circuit that continuously updates these register values. The circuit is normally provided with an alternate power source, such as a battery, which allows the RTC to continue to function when main system power is not available. (C/PA) 2000.2-1999

real-time environment profile A profile designed to support applications requiring bounded response. (C/PA) 1003.13-1998

real-time printout (sequential events recording systems) The recording of actual time that an input signal was received as correlated to a time standard. (PE/EDPG) [5], [1]

real-time service A service that satisfies timing constraints imposed by the service user. The timing constraints are user specific and should be such that the user will not be adversely affected by delays within the constraints. (DIS/C) 1278.2-1995

real-time system A system in which the correctness of a computation depends not only upon the results of the computations but also upon the time at which the outputs are generated. (C/BA) 896.3-1993w

real-time testing (test, measurement, and diagnostic equipment) The testing of a system or its components at its normal operating frequency or timing. (MIL) [2]

real type A data type whose members can assume real numbers as values and can be operated on by real number arithmetic operations, such as addition, subtraction, multiplication, division, and square root. *Contrast:* integer type; logical type; character type; enumeration type. (C) 610.12-1990

real user ID (1) The attribute of a process that, at the time of process creation, identifies the user who created the process. This value is subject to change during the process lifetime. *See also:* user ID. (C/PA) 9945-1-1996, 9945-2-1993

(2) The attribute of a process that, at the time of process creation, identifies the user who created the process. This value is subject to change during the process lifetime. *See also:* user ID. (C) 1003.5-1999

real variable A variable that may assume only real-number values. (C) 1084-1986w

real-world time The actual time in the real world, expressed as Universal Coordinated Time (UTC). (DIS/C) 1278.1-1995

reasoning system In the context of AI-ESTATE, a system that can combine elements of knowledge to draw conclusions. (ATLAS) 1232-1995

reassembly The function in the DQDB layer that provides for the reconstruction of an initial MAC protocol data unit (IMPDU). Reassembly is performed by concatenating the segmentation units received in derived MAC protocol data units (DMPDUs). This is the inverse process to segmentation. (LM/C) 8802-6-1994

reassociation The service that enables an established association [between access point (AP) and station (STA)] to be transferred from one AP to another (or the same) AP. (C/LM) 8802-11-1999

reboot fileset A fileset which, if installed, requires reboot of the operating system to complete its installation, and denoted by having the value of its *is_reboot* attribute set to *true*. (C/PA) 1387.2-1995

rebooting An implementation-defined procedure generally used to terminate and then restart operations on the target system. (C/PA) 1387.2-1995

recalcrescent point The temperature at which there is a sudden liberation of heat when metals are lowered in temperature. *See also:* coupling; induction heating. (IA/MET) 54-1955w, 169-1955w

receipt of a CCS message *See:* receipt of a CCS signal.

receipt of a CCS signal Occurs when the signal or complete message becomes available for acceptance by the processor (that is, stored in the input buffer). *Synonym:* receipt of a CCS message. (COM/TA) 973-1990w

receipt of a per-trunk-signaling supervisory signal Occurs when the state transition that begins the signal is received (that is, E-lead signal or loop open or closure). All times noted are exclusive of hit timing. (COM/TA) 973-1990w

receive (1) The acoustic output of a telephone set due to an electrical input to the telephone set or connecting test circuit. (COM/TA) 269-1992

(2) The acoustic output of a handset or headset due to an electrical input to the device or connecting test circuit. (COM/TA) 1206-1994