

IBM DICTIONARY OF COMPUTING

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FORTH can be run on various types of computers with little or no modification.

FORTRAN control characters See American National Standard control characters.

FORTRAN (formula translation) (1) A programming language primarily used to express computer programs by arithmetic formulas. (A) (2) A programming language primarily designed for applications involving numeric computations. (T)

Note: FORTRAN is used primarily for scientific, engineering, and mathematical applications.

fortuitous distortion ("jitter") A type of telegraph distortion that results in the intermittent shortening or lengthening of the signals. This distortion is entirely random in nature and can be caused, for example, by battery fluctuations, hits on the line, and power induction. See also distortion.

forward To send information, such as received mail, to someone else.

Forward In SAA Basic Common User Access architecture, an action that shows the information that follows the visible information in a panel.

forward chaining An iterative procedure for solving a problem by which the problem is transformed into an instantiation of an axiom or a proven proposition applied to the premises, and another problem to be solved until a conclusion is reached or no further inferences can be made. (T)

forward channel (1) A channel in which the direction of transmission is the direction in which user information is being transferred. (I) (2) Contrast with backward channel.

forward difference matrix In AIX graphics, a 4x4 matrix that is interacted by adding each row to the next row; the bottom row is output as the next point. Points so generated generally fall on a rational cubic curve.

forward file recovery The reconstruction of a file by updating an earlier version with data recorded in a journal. (T) Contrast with backward file recovery.

forward LAN channel In a broadband LAN, the channel assigned for downlink data transmission from the headend to the data stations. (T)

forward recovery (1) The reconstruction of a file by updating an earlier version with data recorded in a journal. (T) (2) The process of reconstructing a file from a particular point by restoring a saved version of

the file and then applying changes to that file in the same order in which they were originally made.

forward supervision The use of supervisory sequences sent from the master to the slave station. Contrast with backward supervision.

four-bit byte Synonym for quartet.

four-plus-one address Pertaining to an instruction that contains four address parts. The plus-one address is the address of the next instruction to be executed unless otherwise specified. (A)

Fourier transforms A complex digital video compression technique in which an image is transformed from the spatial domain to the frequency domain.

four-wire circuit A path in which four wires, two for each direction of transmission, are presented to the station equipment.

four-wire repeater A telephone repeater for use in a four-wire circuit consisting of two amplifiers, one servicing one side or transmission direction of the four-wire circuit and the other servicing the second side of the four-wire circuit.

four-wire terminating set An arrangement by which four-wire circuits are terminated on a two-wire basis for interconnection with two-wire circuits.

FQPCID Fully qualified procedure correlator identifier.

FRACHECK request In RACF, the issuing of the FRACHECK macro or the RACROUTE macro with REQUEST=FASTAUTH specified. The primary function of a FRACHECK request is to check a user's authorization to a RACF-protected resource or function. A FRACHECK request uses only in-storage profiles for faster performance.

fractals In computer graphics, irregular, lifelike landscapes and branching forms produced through simple mathematical formulas.

fractional digit A digit to the right of a decimal point.

fragmentation See storage fragmentation.

fragmentation index The qualitative measure of the scattered free space on a volume.

frame (1) In Open Systems Interconnection architecture, a data structure pertaining to a particular area of knowledge and consisting of slots that can accept the values of specific attributes and from which inferences can be drawn by appropriate procedural attachments.

Synonymous with schema. (T) (2) A data structure that consists of fields, predetermined by a protocol, for the transmission of user data and control data. The composition of a frame, especially the number and types of fields, may vary according to the type of protocol. Synonymous with transmission frame. (T)

(3) In multimedia applications, a complete television picture that is composed of two scanned fields, one of the even lines and one of the odd lines. In the NTSC system, a frame has 525 horizontal lines and is scanned in 1/30th of a second. (4) A housing for machine elements. (5) The hardware support structure, covers, and all electrical parts mounted therein that are packaged as one entity for shipping. (6) The unit of transmission in some local area networks, including the IBM Token-Ring Network; it includes delimiters, control characters, information, and checking characters. (7) In SDLC, the vehicle for every command, every response, and all information that is transmitted using SDLC procedures. (8) A formatted display. See display frame. (9) Any of two types of distributing frames: (a) type A: a distributing frame carrying on one side (horizontal) all outside lines, and on the other side (vertical) the terminations of the central office equipment and protective devices for them; (b) type B: a distributing frame carrying on one side (vertical) all outside lines and protective devices for those lines, and on the other side (horizontal) all connections of the outside lines toward the central office equipment.

frame address In videotape and optical videodiscs, a number assigned to each frame. The addresses are held collectively in a frame address table.

frame address code A code located in the vertical blanking interval of a video frame.

frame animation In multimedia applications, a process in which still images are shown at a constant rate. See also cast animation.

frame buffer (1) In video systems, a device that can store all the 525 lines (in the NTSC format) of a television frame and function as a time base corrector. See also time base corrector. (2) In video systems, a device in which the contents of an image are stored, pixel by pixel and which is used to refresh a raster image. (3) In the AIX operating system, a part of specialized random access memory that stores color information, pixel by pixel, that is seen on the display monitor.

frame chaining In SDLC, the chaining together of two or more message frames in a single data transmission.

frame checking sequence (FCS) See frame check sequence.

frame check sequence (FCS) (1) A character determined by the data present within the transmission frame and appended to the transmission frame to allow detection of transmission errors. (T) (2) A field immediately preceding the closing flag sequence of a frame that contains a bit sequence checked by the receiver to detect transmission errors. (3) In SDLC, 16 bits in a frame that contain transmission-checking information. See also frame, sequenced frames.

frame control field A specified bit pattern that defines the type of transmission frame and certain control functions. (T)

frame-control window A control window, owned by the frame window, that accepts simple input from the user and notifies the frame window or client window when it receives input.

frame-dependent control (FDC) mode A mode of operation for the processor complex consoles in which commands entered at the console act on the data displayed on the screen.

frame differencing In computer graphics, a technique combining temporal encoding and region encoding so that only those regions of a frame that are different from other frames are recorded; used by production level video (PLV). See also production level video (PLV).

frame end delimiter Synonym for ending-frame delimiter. (T)

frame grabber In multimedia applications, a device that digitizes video images.

frame handler (FH) Synonym for frame-relay frame handler (FRFH).

frame handler subport (FHSP) A subport that serves as an intermediate point on a virtual circuit. Contrast with terminal equipment subport (TESP).

frame level See link level.

frame level interface In packet mode operation, the level of the interface between a data terminal equipment (DTE) and a data circuit-terminating equipment (DCE) associated with the exchange of packets contained in frames for local error control. See also packet level interface.

frame number (1) In System/370 virtual storage systems, the part of a real storage address needed to refer to a frame. See also page number, segment number. (2) In multimedia applications, the number used to identify a frame. On videodisc, frames are numbered sequentially from 1 to 54,000 on each side and can be accessed individually; on videotape, the