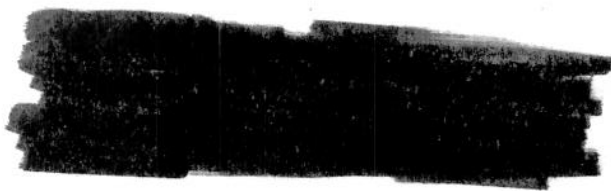


EXHIBIT J

FOR REFERENCE
Do Not Take From This Room

IBM DICTIONARY OF COMPUTING

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wiring. Contrast with soft fault. See also beacon frame, beaconing node.

hard hyphen A hyphen required by the spelling of a word or an expression regardless of its position in a line. Synonymous with embedded hyphen, required hyphen. Contrast with soft hyphen. (T) (A)

hard sector A sector that is established physically on a disk; for example, an index hole at the beginning of the first sector on a diskette or a sector that is written at a predetermined location on a diskette. See also soft sector.

hard sectoring (1) The physical marking of sector boundaries on a magnetic disk. (T) (A) (2) Contrast with soft sectoring. (T) (A)

hard space A space represented by a special character in a string of characters at which a text processor will not break the string. A hard space can also be accomplished by an embedded command. Synonymous with nonbreak space. (T)

hard stop An immediate termination of operation or execution.

hard wait See waiting time.

hardware (1) All or part of the physical components of an information processing system, such as computers or peripheral devices. (T) (A) (2) The equipment, as opposed to the programming, of a system. (3) Contrast with software.

hardware cell In GDDM, the default character box associated with a particular display.

hardware character In GDDM and System/38, an alphanumeric character provided by the display station, usually from a display file. See also mode-2 character, mode-3 character.

hardware check (1) A failure in a hardware unit that halts operation. See also machine check interruption. (2) Synonym for automatic check.

hardware error recovery management system A facility that attempts recovery from hardware malfunctions. It consists of the machine check handler (MCH) and the channel check handler (CCH).

hardware language A representation of a reference language using symbols that are particularly suitable for direct input to a computer; for example, X A in a reference language may become X=A, and X 2 may become X**2 in a hardware language. (T)

hardware logic diagrams (HLDs) A combination of card-on-board logic, power logic, and schematic diagrams for power/thermal subsystems.

hardware monitor The component of the NetView program that helps identify network problems, such as hardware, software, and microcode, from a central control point using interactive display techniques.

hardwired Pertaining to a physical connection; for example, a plug-to-plug wired connection, cable connection, or connection to an auxiliary device via a fixed address.

harmonic The presence of harmonic frequencies, which may be caused by nonlinear characteristics of a transmission line, in a response when a sinusoidal stimulus is applied.

harmonic distortion See distortion.

harmonic telephone ringer A telephone ringer that responds only to alternating current within a very narrow frequency band. A number of such ringers, each responding to a different frequency, are used in one type of selective ringing where there are several parties on a subscriber's line.

hartley In information theory, a unit of logarithmic measure of information equal to the decision content of a set of ten mutually exclusive events expressed by the logarithm to base ten; for example, the decision content of a character set of eight characters equals 0.903 hartley ($\log_{10} 8 = 0.903$). (I) (A) Synonymous with information content decimal unit.

hashing (1) A method of transforming a search key into an address for the purpose of storing and retrieving items of data. The method is often designed to minimize the search time. (T) (2) The application of an algorithm to the records in a data set to obtain a symmetric grouping of the records. Synonymous with key folding. (3) In an indexed data set, the process of transforming a record key into an index value for storing and retrieving a record.

hash table A table of information that is accessed by way of a shortened search key (the hash value). Using a hash table minimizes average search time.

hash total The result obtained by applying an algorithm to a set of heterogeneous data for checking purposes; for example, a summation obtained by treating data items as numbers. (T) Synonym for control total.

HASP Houston automatic spooling priority system. A computer program that provides supplementary job management, data management, and task management