

K

Katakana A character set used in a Japanese phonetic alphabet.

KB (*See Kilobyte.*)

K band The range of frequencies 10–12 GHz.

Kbps (kilobits per second) A unit of data transfer, which equates to 1000 bits per second.

KBps (kilobytes per second) A unit of data transfer, which equates to 1000 bytes per second.

KBS (Knowledge-Based System) An alternative name for an expert system, which includes a knowledge base of rules or heuristics, each comprising fact(s) and conclusion(s), i.e. IF disk drive light off THEN check ribbon cable. Such conclusions and deductions may be weighted appropriately. The rule base is chained by an inference engine, which chains:

- backwards, comparing an inputted question with conclusions in the rule base, and may compare subsequently located facts with conclusions of other rules
- forwards, comparing an inputted question with facts in the rule base, and may compare subsequently located conclusions with facts of other rules.

A KBS can offer informed decision-making skills, the effectiveness of which is a function of the accuracy and comprehensiveness of its rule or knowledge base. A knowledge engineer is responsible for generating a rule base; it has proven to be a complex and arduous process. Numerous KBS applications exist, including medicine, business, stock market and maintenance. Web-based KBS solutions exist.

See: Cawsey, Alison. *The Essence of Artificial Intelligence*, Prentice Hall, 1998. (*See Neural network*)

Kbyte

Kbyte (*See Kilobyte.*)

Kermit A file transfer protocol, which is asynchronous.

Kernel A core component of an operating environment. The Windows kernel is responsible for a number of tasks, including memory management and dynamic linking.

KERNEL32.DLL A DLL included in Windows 3.1 and Windows 95.
(*See DLL.*)

Kernel driver A driver which interacts with an internal or external device.

Key A means of making encrypted data unique and a means of decrypting data.

(*See Cryptography.*)

Keyboard A physical device used for data entry and interaction with a computer. The most common variant is the standard QWERTY keyboard.

Keyboard buffer A segment of internal memory (or FIFO queue) used to store the character codes which emanate from a keyboard or comparable input device.

Key field A key field is included in a database in order to prevent the duplication of contained field values and to expedite information retrieval. Key fields are also used to link tables or files in relational databases. Where it is necessary to repeat values in a key field, additional fields are keyed. These are termed multi-field keys.

kHz (kilohertz) A unit of frequency which equates to 1000 cycles per second.

Kilobyte (or Kbyte or KB) A unit of memory which has 1024 bytes. Occasionally disk drive manufacturers equate Kbyte to 1000 bytes in accordance with the metric interpretation of kilo. It is derived from a 10 bit address bus, or 10 bit pointer register, thus giving access to 2^{10} (1024) memory locations.

Kilostream A digital service provided by BT, which requires the customer to have a Network Terminating Unit (NTU). It provides data rates of 2.4 Kbps, 4.8 Kbps, 9.6 Kbps, 48 Kbps and 64 Kbps.

Kiosk application A multimedia application intended to interface with the general public. The multimedia system may or may not be housed in a physical kiosk. Such applications might provide maps, tourist information, point-of-information, point-of-sale etc.

Kiosk mode A mode of operation which causes Netscape Navigator to start without the toolbar and menu bar.

Knowledge base 1. An information database which is accessible via a Web site. 2. A set of rules that determines the functionality of an expert system. The rules may be simple IF...THEN rules.

(See KBS.)

Knowledge engineer A person responsible for programming an expert system.

(See KBS.)