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Data Carrier Detected \dā`tə kâr`ē-er də-tek`əd, dat`ə\ *n.* See DCD.

data chaining \dā`tə chā`nēng, dat`ə\ *n.* The process of storing segments of data in noncontiguous locations while retaining the ability to reconnect them in the proper sequence.

data channel \dā`tə chan`əl, dat`ə\ *n.* See channel.

data collection \dā`tə kə-lek`shən, dat`ə\ *n.* **1.** The process of acquiring source documents or data. **2.** The grouping of data by means of classification, sorting, ordering, and other organizing methods.

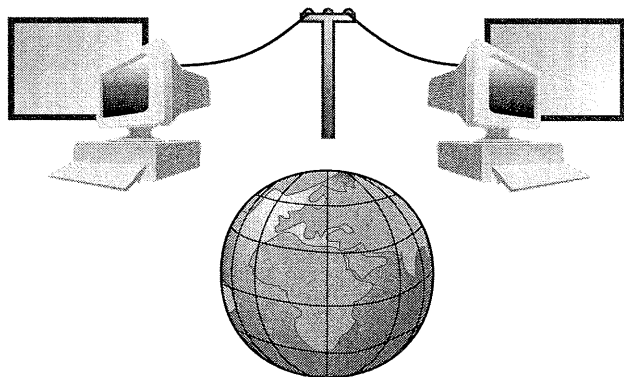
datacom \dā`tə-kom`, dat`ə-kom`\ *n.* Short for **data communications**. See communications.

data communications \dā`tə kə-myōō-nə-kā`shənz, dat`ə\ *n.* See communications.

data compaction \dā`tə kəm-pak`shən, dat`ə\ *n.* See data compression.

data compression \dā`tə kəm-presh`ən, dat`ə\ *n.* A means of reducing the amount of space or bandwidth needed to store or transmit a block of data, used in data communications, facsimile transmission, and CD-ROM publishing. Also called data compaction.

data conferencing \dā`tə kon`frən-sēng, dat`ə\ *n.* Simultaneous data communication among geographically separated participants in a meeting. Data conferencing involves whiteboards and other software that enable a single set of files at one location to be accessed and modified by all participants. See the illustration. See also desktop conferencing, whiteboard. Compare video conferencing.



Data conferencing.

data control \dā`tə kən-trōl`, dat`ə\ *n.* The aspect of data management concerned with tracking how

and by whom data is used, accessed, altered, owned, and reported on.

data corruption \dā`tə kər-up`shən, dat`ə\ *n.* See corruption.

data declaration \dā`tə de-klər-ā`shən, dat`ə\ *n.* A statement in a program that specifies the characteristics of a variable. The requirements for data declarations vary among different programming languages but can include such values as variable name, data type, initial value, and size specification. See also array, data type, record¹, variable.

data definition language \dā`tə def-ə-nish`ən lang-wəj, dat`ə\ *n.* A language that defines all attributes and properties of a database, especially record layouts, field definitions, key fields, file locations, and storage strategy. *Acronym:* DDL (D`D-L`).

data description language \dā`tə dəs-krip`shən lang-wəj, dat`ə\ *n.* A language designed specifically for declaring data structures and files. See also data definition language.

data dictionary \dā`tə dik`shə-nâr-ē, dat`ə\ *n.* A database containing data about all the databases in a database system. Data dictionaries store all the various schema and file specifications and their locations. They also contain information about which programs use which data and which users are interested in which reports.

data directory \dā`tə dər-ek`tər-ē, dat`ə\ *n.* See catalog, data dictionary.

data-driven processing \dā`tə-driv-ən pros`es-ēng, dat`ə-driv-ən\ *n.* A form of processing where the processor or program must wait for data to arrive before it can advance to the next step in a sequence.

data element \dā`tə el`ə-ment, dat`ə\ *n.* A single unit of data. Also called data item. See also data field.

data encryption \dā`tə en-krip`shən, dat`ə\ *n.* See encryption.

data encryption key \dā`tə en-krip`shən kē, dat`ə\ *n.* A sequence of data that is used to encrypt and decrypt other data. *Acronym:* DEK (D`E-K`³). See also decryption, encryption, key (definition 3).

data encryption standard \dā`tə en-krip`shən stan`dərd, dat`ə\ *n.* See DES.

data entry \dā`tə en`trē, dat`ə\ *n.* The process of writing new data to computer memory.

PCs that allows for increasing memory beyond the Intel 80x86 microprocessor real-mode limit of 1 megabyte. In earlier versions of microprocessors, EMS bypassed this memory board limit with a number of 16-kilobyte banks of RAM that could be accessed by software. In later versions of Intel microprocessors, including the 80386 and 80486 models, EMS is converted from extended memory by software memory managers, such as EMM386 in MS-DOS 5. Now EMS is used mainly for older MS-DOS applications because Windows and other applications running in protected mode on 80386 and higher microprocessors are free of the 1-MB limit. *Also called* LIM EMS. *See also* expanded memory, protected mode. *Compare* conventional memory, extended memory.

em space \em´ spās\ *n.* A typographical unit of measure that is equal in width to the point size of a particular font. For many fonts, this is equal to the width of a capital M, from which the em space takes its name. *Compare* en space, fixed space, thin space.

emulate \e´myə-lāt\ *vb.* For a hardware or software system to behave in the same manner as another hardware or software system. In a network, for example, microcomputers often emulate mainframes or terminals so that two machines can communicate.

emulation \e´myə-lā´shən\ *n.* The process of a computer, device, or program imitating the function of another computer, device, or program.

emulator \e´myə-lā´tər\ *n.* Hardware or software designed to make one type of computer or component act as if it were another. By means of an emulator, a computer can run software written for another machine. In a network, microcomputers might emulate mainframes or terminals so that two machines can communicate.

emulsion laser storage \ē-mul´shən lā´zər stōr-`əj\ *n.* A method for recording data in film by selective heating with a laser beam.

enable \e-nā´bl\ *vb.* To activate or turn on. *Compare* disable.

encapsulate \en-kap´sə-lāt\ *vb.* To treat a collection of structured information as a whole without affecting or taking notice of its internal structure. In communications, a message or packet constructed according to one protocol, such as a TCP/

IP packet, may be taken with its formatting data as an undifferentiated stream of bits that is then broken up and packaged according to a lower-level protocol (for example, as ATM packets) to be sent over a particular network; at the destination, the lower-level packets are assembled, re-creating the message as formatted for the encapsulated protocol. In object-oriented programming, the implementation details of a class are encapsulated in a separate file whose contents do not need to be known by a programmer using that class. *See also* ATM (definition 1), object-oriented programming, TCP/IP.

Encapsulated PostScript \en-kap`sə-lā-təd pōst´skript\ *n.* *See* EPS.

encapsulated type \en-kap`sə-lā-təd tīp\ *n.* *See* abstract data type.

encipher \en-sī´fər\ *vb.* *See* encryption.

encode \en-kōd\ *vb.* **1.** In data security, to encrypt. *See also* encryption. **2.** In programming, to put something into code, which frequently involves changing the form—for example, changing a decimal number to binary-coded form. *See also* binary-coded decimal, EBCDIC.

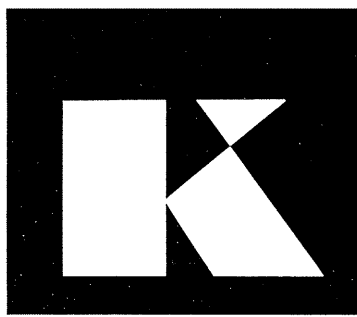
encryption \en-krip´shən\ *n.* The process of encoding data to prevent unauthorized access, especially during transmission. Encryption is usually based on a key that is essential for decoding. The U.S. National Bureau of Standards created a complex encryption standard, Data Encryption Standard (DES), which provides almost unlimited ways to encrypt documents. *See also* DES.

encryption key \en-krip´shən kē\ *n.* A sequence of data that is used to encrypt other data and that, consequently, must be used for the data's decryption. *See also* decryption, encryption.

end-around carry \end`ə-round kār`ē\ *n.* A special type of end-around shift operation on a binary value that treats the carry bit as an extra bit; that is, the carry bit is moved from one end of the value to the other. *See also* carry, end-around shift, shift.

end-around shift \end`ə-round shift\ *n.* An operation performed on a binary value in which a bit is shifted out of one end and into the other end. For example, a right-end shift on the value 00101001 yields 10010100. *See also* shift.

en dash \en´ dash\ *n.* A punctuation mark (–) used to show ranges of dates and numbers, as in



K¹ \K, kil'ō-bīt\ *n.* Short for **kilobyte**.

K² \K, kil'ō\ *prefix* See kilo-.

K&R C \K'ænd-R C'\ *n.* Short for (Brian W.) **Kernighan** and (Dennis M.) **Ritchie C**. The version of the C programming language, defined by those two authors, that was the informal C standard until a more formal standard was developed by an ANSI committee. See also C.

.k12.us \dot-K-twelv`dot-U-S'\ *n.* On the Internet, the major geographic domain specifying that an address is a U.S. K-12 (kindergarten through high school) educational site.

Kb \kil'ə-bit`, K-B'\ *n.* See kilobit.

KB \kil'ə-bīt`, K-B'\ *n.* See kilobyte.

Kbit \K'bit, kil'ə-bit'\ *n.* See kilobit.

Kbps \K'B-P-S'\ *n.* See kilobits per second.

Kbyte \K'bīt, kil'ə-bīt'\ *n.* See kilobyte.

kc \K-C'\ *n.* See kilocycle.

.ke \dot`K-E'\ *n.* On the Internet, the major geographic domain specifying that an address is located in Kenya.

Kerberos or **kerberos** \kər'bər-os'\ *n.* A network authentication protocol developed by MIT. Kerberos authenticates the identity of users attempting to log on to a network and encrypts their communications through secret-key cryptography. A free implementation of Kerberos is available from MIT (<http://web.mit.edu/kerberos/www/>), although it is also available in many commercial products. See also authentication, cryptography.

Kermit \kər'mit\ *n.* A file transfer protocol used in asynchronous communications between computers. Kermit is a very flexible protocol used in many software packages designed for communications over telephone lines. Compare Xmodem, Ymodem, Zmodem.

kern \kərn\ *vb.* To alter selectively the distance between pairs of letters for readability and to make the type spacing more balanced and proportional. See the illustration.

kernel \kər'nəl\ *n.* The core of an operating system—the portion of the system that manages memory, files, and peripheral devices; maintains the time and date; launches applications; and allocates system resources.

key \kē\ *n.* **1.** On a keyboard, the combination of a plastic keycap, a tension mechanism that suspends the keycap but allows it to be pressed down, and an electronic mechanism that records the key press and key release. **2.** In database management, an identifier for a record or group of records in a datafile. See also B-tree, hash², index¹ (definition 1), inverted list, key field. **3.** The code for deciphering encrypted data. **4.** A metal object used with a physical lock to disable a computer system.

keyboard \kē'bōrd\ *n.* A set of switches that resembles a typewriter keyboard and that conveys information from a user to a computer or data communications circuit. See also Alt key, Apple key, arrow key, Backspace key, Break key, Caps Lock key, character code, Clear key, Command key, control character, Control key, Delete key, Dvorak keyboard, End key, enhanced keyboard, Enter key, ergonomic keyboard, Escape key, function key, Help key, Home key, Insert key, keyboard buffer, keyboard controller, keyboard enhancer, keycap, key code, Num Lock key, numeric keypad, Option key, original Macintosh keyboard, Page Down key, Page Up key, Pause key, PC/XT keyboard, Power-on key, Print Screen

AWAKE
AWAKE

Kern. The first three letters of the second example are kerned.

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