

## คำศัพท์ต่างๆ ที่ควรรีบความหมาย

**account:** Enables access to the system software (command interpreters, compilers, utilities, and so on) including the ability to perform work of a general nature (program development, text editing, and so on).

**ASCII:** American Standard Code for Information Interchange. ASCII is the standard format for sending readable text. It is a code used by many computers to translate letters, numbers, and symbols from a keyboard into machine code, and vice versa.

Thus, an ASCII file is a file that can be read both by people and by computers.

**assembler:** Language processor that translates a source program containing assembly language directives and machine instructions into an object module.

**assembly language:** Machine oriented programming language. VAX MACRO is the assembly language for the VAX computer.

**assignment statement:** Definition of a symbol name to use in place of a character string or numeric value. Symbols can define synonyms for system commands or can be used for variables in command procedures.

**batch:** Mode of processing in which all commands to be executed by the operating system and, optionally, data to be used as input to the commands are placed in a file or punched onto cards and submitted to the system for execution.

**batch job:** A noninteractive process.

**buffer:** A temporary storage area.

**command:** An instruction or request for the system to perform a particular action. An entire command string consists of the command name with any parameters and/or qualifiers.

- command interpreter:** The operating system component responsible for reading and translating interactive and batch commands. The default command interpreter for the VAX/VMS operating system is what interprets the DIGITAL Command Language (DCL).
- command string:** A command with any parameters and/or qualifiers.
- command procedure:** File containing a sequence of commands to be executed by the operating system. The command procedure can be submitted for execution at the terminal or as a batch job.
- compiler:** Language processor that translates a source program containing high-level language statements (for example, FORTRAN) into an object module.
- concatenate:** To link together in a series.
- CPU:** Central Processing Unit. It is the hardware that handles all calculating and routing of input and output (I/O), as well as executing images. The CPU is the part of the computer that actually computes.
- cursor:** A flashing indicator used on video terminals to point to the screen position where the next character will appear. It is called a "cursor" because it shows the "course" or direction the printed or typed line will follow.
- data:** A general term used for any representation of facts, concepts, or instructions in a form suitable for communication, interpretation, or processing. When commands prompt you for command elements, they are asking you for data to process.
- DCL:** DIGITAL Command Language. It provides a means of communication between the user and the operating system. DCL is designed for ease of use. Commands are English words, and if necessary elements are not typed in, DCL will prompt you for them.
- debugger:** Interactive program that allows you to display and modify program variables during execution and to step through a program to locate and detect programming errors.
- default:** Value supplied by the system when a user does not specify a required command parameter or qualifier.

**default disk:** The disk from which the system reads and to which the system writes, by default, all files that you create. The default is used whenever a file specification in a command does not explicitly name a device.

**delimiter:** A character that separates, terminates, or organizes elements of a character string or statement. For example, in the file specification, STORIES.DAT, the period (.) is the delimiter that enables the system to tell the difference between the file name STORIES and the file type DAT.

**device:** Any peripheral hardware connected to the processor and capable of receiving, storing, or transmitting data. Line printers and terminals are examples of record-oriented devices. Magnetic tapes and disks are examples of mass-storage devices. Terminal line interfaces and interprocessor links are examples of communications devices. All devices have names either in the form ddnn:, where dd is a two-letter mnemonic, nn is an octal number, and the colon(:) is a required terminator or as a logical name.

**device name:** Identification of a physical device (for example, DBA2) or a logical name (for example, SYS\$OUTPUT) that is equated to a physical device name.

**directory:** A file that briefly catalogs a set of files stored on disk or tape. The directory includes the name, type, and version number of each file in the set.

**disk:** High-speed, random-access devices. There are several kinds of disks. Floppy disks are small, flexible disks. Hard disks are either fixed in place or removable. Removable disk types include a single hard disk enclosed in a protective case and a stacked set of disks enclosed in a protective case.

**echo:** The display of a character either on the screen or hard copy that was typed on a terminal keyboard. Terminals are dual devices, sending input and receiving output. Typing on the terminal is sending input to the computer. Echoing is receiving output from the computer.

**editor:** Program that creates or modifies files. In VAX/VMS, the default system editor is EDT, which is interactive.

**equivalence name:** Character string equated to a logical name. When a command or program refers to a file or device by its logical name, the system translates the logical name to its predefined equivalence name

**error message:** Sent by the system when some action you have requested fails. Each error message identifies the particular part that detected the error. The great majority of error messages result from typing mistakes or mistakes in syntax. Often, you can correct the error by retyping the command.

**field:** Usually refers to a portion of a command or a command element. For example, the file name and file type are two fields of a file specification.

**file:** Collection of data treated as a unit; generally used to refer to data stored on magnetic tapes or disks.

**file name:** The name component of a file specification.

**file specification:** Unique identification of a file. A file specification describes the physical location of the file, as well as file name and file type identifiers that describe the file and its contents.

**file type:** The type component of a file specification. A file type generally describes the nature of a file, or how it is used. For example, FOR indicates a FORTRAN source program.

**folder:** A subdivision of a file in which you can store mail messages.

**form feed:** Analogous to a line feed, but instead of moving down one line to resume printing, the line printer moves past the perforations in the paper to the top of a new form or page. A form feed consists of a number of line feeds.

**functionality:** A computer industry term for what the hardware or software can do.

**global symbol:** A symbol defined with an assignment statement that is recognized in any command procedure that is executed.

**hanging:** A terminal or process that appears to be going nowhere or doing nothing. Hung terminals are sometimes described as static, dormant, or locked. Hung terminals may result from a busy system, a crash, or unavailability of system resources.

**hard-copy terminal:** Terminals that print output on paper are called hard-copy terminals.

**hardware:** The physical computer equipment, including such mechanical devices as the line printer, the terminals, the mass-storage devices, and so forth.

**header page:** Printed page at the beginning of a listing that identifies the printed file.

**help file:** A text file in a format suitable for use with the HELP command. Help files can include simply organized information and can provide up to nine levels of search.

**high-level language:** Transportable programming language, such as BASIC, FORTRAN, or COBOL. Programs in these languages are not tied to a particular kind of computer. Each programming statement in a high-level language is translated into several machine-language instructions.

**image:** Output from the linker, created from processing one or more object modules. An image is the executable version of a program.

**input file:** File containing data to be transferred into the computer.

One common mistake made in using the system is confusing input and output files. DCL usually prompts for these files, but most system utilities require you to identify your input and output files by position in a command line. You should be sure of the syntax for the command you are using.

**interactive:** Mode of communication with the operating system in which a user enters a command, and the system executes it and responds.

**job:** (1) The accounting unit equivalent to a process; jobs are classified as batch or interactive. (2) A print job.

**K:** A unit for measuring the size of memory or similar resources. K is short for kilo and is used roughly to mean 1000, although formally K is equal to 1024.

**keypad:** The small set of keys next to the main keyboard on a terminal.

**keyword:** A command name, qualifier, or option. Keywords must be typed verbatim or truncated according to the rules of DCL.

**lexical function:** A command language construct that the command interpreter evaluates and substitutes before it parses a command string. Lexical functions return information about the current process (for example, the UIC or default directory) and about character strings (for example, their length or the location of substrings).

**line editor:** Program that allows you to make additions and deletions to a file on a line by line basis.

**line printer:** An output device that prints files a line at a time. It is used for printing large amounts of output that would otherwise tie up a slower device.

**linker:** Program that creates an executable program, called an image, from one or more object modules produced by a language compiler or assembler. Programs must be linked before they can be executed.

**local symbol:** A symbol defined with an assignment statement that is recognized only within the command procedure in which it is defined.

**log in:** To perform a sequence of actions at a terminal that establishes a user's communication with the operating system and sets up default characteristics for the user's terminal session.

**log out** To terminate interactive communication with the operating system. The LOGOUT command executes the procedure and ends a terminal session.

**logical name:** Character string used to refer to files or devices by other than their specific names. A command or program can refer to a file by a logical name; the logical name can be equated to an equivalence name at any time; when the command or program refers to the logical name, the system translates the logical name to its defined equivalence name.

**logical name table:** A table that contains a set of logical names and their equivalence names for a particular process, a particular group, or the system.

**machine code:** A sequence of binary machine instructions in a form executable by the computer.

**magnetic tape:** Medium on which data can be stored and accessed.

**mass-storage device:** An input/output device where data and other types of files are stored while they are not being used. Typical mass-storage devices include disks, magnetic tapes, floppy disks, and DECTapes. Each mass-storage device uses a particular magnetic medium to hold its data.

**memory:** A series of physical locations into which data or instructions can be placed in the form of binary words. Each location in memory can be addressed and its contents can be altered.

**network:** A collection of interconnected computer systems.

**node:** An individual computer system in a network that can communicate with other computer systems in the network.

**node specification:** The component of a file specification that identifies the location of a computer system in a network of computer systems.

**object module:** Output from a language compiler or assembler that can be linked with other object modules to produce an executable image. An object module is a file with a file type of OBJ.

**operating system:** The system software that controls the operations of the computer.

**operator:** A person responsible for maintaining the system. Within small systems, the job may be combined with that of the system manager or informally divided among several people. The responsibilities of the operator include changing ribbons, rebooting the system, and keeping records.

**output file:** File to which the computer transfers data.

**parameter:** Object of a command. A parameter can be a file specification, a symbol value passed to a command procedure, or a word defined by the DIGITAL Command Language.

- parse:** Break a command string into its elements to interpret it. For example, a PRINT command without a file specification, or with illegal characters in the file specification, will not parse correctly.
- password:** Protective word associated with a user name. A user logging in to the system must supply the correct password before the system will permit access.
- peripheral devices:** Any unit, distinct from the CPU and memory, that can provide the system with input or accept output from it. Terminals, line printers, and disks are peripheral devices.
- priority:** A rank assigned to a process to determine its precedence in obtaining system resources when the process is running.
- program:** A series of instructions written for the computer to follow.
- prompt:** A symbol used by the system as a cue to signal that the system is ready to accept input from you.
- protection code:** Specifies what access different categories of system users may have to the file and what they may do to the file when they access it.
- qualifier:** Command modifier that describes the operation of a command. A qualifier is always preceded by a slash character (/).
- queue:** A line of items waiting to be processed.
- random access:** This term refers to memory or mass-storage devices where all information is equally accessible. With random access, the next location from which data is to be obtained is not dependent on the location of the last data obtained. All records appear to be adjacent on a random-access device. As far as the use is concerned, there is no beginning, middle, or end to the data.
- range specification:** Used with the EDT line editor to define the line(s) to be affected by the editing command.
- reverse video:** A feature of the VT100 terminal that reverses the default video contrast. If black figures on a white background is the default, reverse video displays white on black. Reverse video is used with some EDT keypad commands to highlight a range of text.



**RMS:** Record Management Services. RMS is a sophisticated set of routines used to open and close files, read from files, and extend and delete files.

**scrolling:** When more than a screenful of output is sent to a video terminal, the output scrolls up. New output appears at the bottom of the screen and eventually disappears when it reaches the top, just as if it were on a scroll that is being unrolled at the bottom and rolled at the top.

**sequential access:** Records or files read one after another in the order in which they appear in the file or volume. Magnetic tape is a sequential-access medium. If you are half way through the tape and wish to read some record that is a third of the way through the tape, you must go back to the beginning and read through until you get to the record that you want.

**software:** The collection of images, procedures, rules, and documentation associated with the operation of a particular computer system. For example, the operating system is software.

**source program:** A program written in text form that must be compiled or assembled to be used.

**string:** A sequence of characters. When you use an editor to search for a word or phrase, you are searching for a string. The sequence of characters that forms a command is often called a command string.

**subdirectory:** Directory file cataloged in a higher-level directory that lists additional files belonging to the owner of the directory.

**subroutine:** A routine that can be used as part of another routine. For instance, you might write a routine to print the time in large numbers on your terminal. You could then call that routine as a subroutine in some task that required printing the time in large numbers.

**switch hook character:** The Phone Utility prompt. You must type the switch hook character (which is a percent sign by default) before you enter a PHONE command.

**symbol:** An entity that must be defined, or given a meaning, so that it can be used.

CS 220 (H)

**syntax:** The form that a command must follow. Misspelled words are the most common syntax errors

**system manager:** Person who makes resources available to users and sets up restrictions governing the use of such resources.

**terminal:** Hardware communication device, with a typewriter-like keyboard that receives and transmits information between users and the system.

**timesharing:** A time-sharing system is a system in which each user gets equal computer time in turn. This is in contrast to the allocation based on need and priority in a real-time system.

**UIC:** User identification code. This code identifies a user by a group number and a member number. (Both numbers are enclosed in brackets.)

**user name:** Name by which the system identifies a particular user. To gain access to the system, a user specifies a user name followed by a password.

**utility:** A general-purpose program that performs tasks included in an operating system to perform common functions, such as editing or file handling.

**version number:** Numeric component of a file specification. When a file is edited, its version number is increased by one.

**volume:** The largest logical unit of the file structure. A volume contains files and corresponds to a physical unit of mass storage.

**wildcard character:** A symbol used with many DCL commands in place of all or part of a file specification to refer to several files rather than specifying them individually.