

GLOSSARY

HT (Horizontal Tab)

Command Processor: Reserved character.

Δ (space or blank)

Command Processor and Utilities: Reserved character; separates arguments and commands. *Operator Interface Manager:* At the beginning of a line, interrupts output.

! (exclamation point)

File System: A prefix indicating a physical device (sympd) name (for example, !LPT00). *Line Editor:* Escape character (for example, !F).

" (quotation mark)

Command Processor: Reserved character delimiting strings that contain embedded blanks (for example, "D. COOK"). See ' (apostrophe).

(number sign)

Line Editor: Signifies condition in If Data, If Range, and If Line directives. *Linker:* Specifies the current address.

\$ (dollar sign)

Line Editor: In an address expression, represents the last line of the buffer (for example, \$P). In any other Line Editor expression, represents the end of a line (for example, /DIVISION.\$/). *Linker:* Specifies the next location (for example, BASE \$). *File System:* First character of a macrocall name or mailbox (for example, \$GTFIL).

% (percent sign)

Linker: Address argument representing the location two bytes greater than the highest address previously used in a linked root or overlay (for example, LDEF XTAG,%). *Copy, Compare, Compare ASCII, and Rename Commands:* Represents the character in the corresponding component and letter position of the entry name (for example, START_U%.EC).

& (ampersand)

Line Editor: Used in the string expression of the Substitute directive to indicate that the current expression is to be repeated (for example, S/TO BE/& OR NOT &/). *Multi-User Debugger (numeric):* Address symbol, representing the next address beyond the address used in the previous debug directive. *Command Processor:* Reserved character. Indicates continuation of a command on more than one line. *Execute Command:* Indicates EC directives and comment lines (for example, &P BEGIN LINK). *TCL Compiler:* Indicates continuation of a statement on more than one line.

' (apostrophe)

Command Processor: Reserved character. See " (quotation mark).

() (parentheses)

Multi-User Debugger (Numeric): Delimits action lines to be stored for later use. *Line Editor:* Delimits multicharacter buffer name; optionally, delimits single-character buffer name (for example, B(EXEC)). *TCL Compiler:* Indicates insertion of field value.

* (asterisk)

Line Editor: In a regular expression any number of the preceding character. In a search directive, conditionality. *CLM, TCL Compiler, Patch:* Comment directive (for example, *SYSTEM DATA). *File System:* Represents one component of a file name (for example, COBPRG.*). In relation to Access Control Lists (ACLs) and Common Access Control Lists (CACLS), represents any person, account, and/or mode (for example, COOK.*.INT). *List Profile Utility, Multi-User Debugger (Numeric):* Signifies "all."

+ (plus sign)

Line Editor: Indicates addition to an address (for example, `+.2P`, `/NEW/+3`). *Multi-User Debugger (Numeric)*: Performs addition.

, (comma)

Line Editor: Separates two addresses to be referenced inclusively (for example, `1,5P`). *CLM, Linker, Sort, and Merge*: Separates arguments within directives.

- (minus sign)

Command Processor: Immediately precedes a control argument (for example, `-ECL`). *Line Editor*: Indicates subtraction from an address (for example, `-.2P`). *Multi-User Debugger (Numeric)*: Performs subtraction.

. (period, decimal point)

File System: (1) Separates an entry name into components (for example, `COBPRG.C`). (2) Used as a single element at the beginning of a pathname to indicate the working directory (for example, `.>FILE_DUMP`). *Line Editor*: (1) In an address, represents the current line of the buffer (for example, `.P`). (2) In a regular expression, designates any character (for example, `/PROG.AM/`). *Multi-User Debugger*: Address symbol, representing the same starting address used in the previous debug directive. *TCL Compiler*: Indicates the end of a statement.

/ (slash)

File System: If first character of a star name, negates the meaning of the star name (for example, `/*.WORK`). See * (asterisk). *Line Editor*: Delimits strings in Expressions and Substitute directive (for example, `S/OLD/NEW/`). *Patch and File Change*: Immediately precedes a relative location or offset. *Multi-User Debugger*: Separates location from repetition value. *Linker*: Precedes a comment in a Linker directive file (for example, `/SECOND OVERLAY`).

: (colon)

Line Editor: Indicates label definition (for example, `:7`).

; (semicolon)

Line Editor: Separates two addresses; the first address becomes the current line, after which the value of the second address is calculated (for example, `2;.3P`). *Patch*: Separates arguments in Patch directives. *Sort and Merge*: Separates directives. *Linker*: Separates Linker directives on one line. *Command Processor*: Reserved character. Separates commands. *Multi-User Debugger*: Separates directives.

< (less-than)

File System: Indicates movement in the storage hierarchy toward the root and a change in one level in that direction (for example, <LIBRARY).

Assembler and Patch: Immediately precedes a relocatable address.

Multi-User Debugger: Specifies the condition to be satisfied in an IF directive for conditional processing of the directive line.

= (equal)

Line Editor: Print Line Number directive. *Multi-User Debugger*

(Numeric): Expresses equality for an IF directive. *Linker:* Address argument, specifying the base address associated with the object unit identified by an associated label (for example, BASE =OPNCRD). *Copy, Compare, Compare ASCII, and Rename commands:* Represents the corresponding component of a file name (for example, COPY FILE.A =.B).

> (greater-than)

File System: (1) Used at the beginning of a pathname to indicate a file or directory under the User Root Directory (URD) (for example, >SYSLIB2) and (2) Within a pathname, indicates movement in the storage hierarchy away from the root; connects two directory names or a directory name and a file name (for example, ^MYVOL>MYDIR>MYFILE). *Line Editor:* Go To directive (for example, >1). *Multi-User Debugger:* Specifies the condition to be satisfied in an IF directive for conditional processing of the directive line. *Assembler and Patch:* Indicates short displacement address. *Execute Command:* In a &> directive, go to first occurrence of the label following the current line.

>> (two consecutive greater-than signs)

File System: Used at the beginning of a pathname to indicate a file or directory under the System Root Directory (SRD) (for example, >>SID).

~ (tilde)

File System: Indicates the name of a magnetic tape volume. Allows a labeled tape volume to be referenced without specifying the name of a tape device.

? (question mark)

Line Editor: Address Prefix directive. *Copy, Compare, Compare ASCII, and Rename Commands:* Represents any character appearing in the corresponding component and letter position of a file name (for example, START_?P.EC). (See %.) *File System and Command Processor:* Immediately precedes a symbolic start address (entry point) in a bound unit name (for example, NOW?TIME). In some commands, requests help (for example, EP (Edit Profile)).

@ (at-sign)

TTY Terminal Driver: Delete the previously typed character (for example, TIMM@E).

[] (brackets)

Command Processor and TCL Compiler: Delimits active functions (for example, (CWD [USER NAME])). *Multi-User Debugger (Numeric):* Signifies the contents of the location defined by the expression within the brackets.

^ (circumflex)

File System: (1) Indicates a root directory, and must immediately precede a root directory name (for example, ^SYSRES) and (2) Used as a single element at the beginning of a pathname to indicate the root of the working directory (for example, ^>MYDIR). *Line Editor:* (1) When designated as the first character of a string, requests lines beginning with the string, excluding the circumflex (for example, /[^]IDENTIFICATION/) and (2) Indicates negation in certain directives. *Multi-User Debugger (Numeric):* Indicates negation as part of an IF directive.

_ (underscore)

File System: Joins two or more words in a file or directory name that the system is to interpret as one word (for example, LIST_PROG).

(pound sign)

Line Editor: If Data directive.

abbrev, login

See login abbreviation

abbreviation file

A file containing user-defined abbreviations and the character strings they represent.

abbreviation, login

See login abbreviation.

abbreviation processor

A system component that expands abbreviated commands and passes them to the Command Processor.

abort

An operator action resulting in the immediate cessation of operation of a task group or the operation of the currently executing request in a task group. All resources are returned to the Executive. The bound unit of the lead task of an aborted request may be retained.

absentee

A processing mode characterized by the absence of interaction between you and the system during execution of your program.

Access Control List (ACL)

A list specifying which user(s) can use the resource with which the list is associated.

ACL

See Access Control List.

activate

An operator action resulting in the resumption of a previously suspended task group. (See Suspend.)

active

A task is in the active state when it is executing or ready to execute, when its priority level becomes the highest active one in the central processor.

active function

A form of a command whose output string is placed in the command line before the rest of the line is processed.

active level

The priority level currently in effect.

address, absolute

A reference to a storage location that has a fixed displacement from absolute memory location zero.

address, relocatable

A reference to a storage location that has a fixed displacement from the program origin, but whose displacement from absolute memory location zero depends upon the loading address of the program.

administrator, system

Person responsible for registering users so that they can access the MOD 400 system.

after image

The image of a record in a restorable disk file as it exists after alteration. Written to a system journal file.

algorithm

A set of well defined rules for the solution of a problem.

alternate index

An organization used to view a file ordered with different keys. The same data file can be ordered in many different ways by having more than one alternate index.

application program

A user-written program for the solution of a business, industrial, or scientific problem.

area

A DM6 I-D-S/II integrated file.

argument

User-selected items of data that are passed to a procedure (for example, system service macrocall arguments that are passed to the called system service, or command arguments passed to the invoked task). Synonymous with arg. (See parameter.)

argument, control

A keyword whose value specifies a command option. (See keyword.)

argument, positional

An argument whose position in the command line indicates to which variable the item of data is applied.

ASCII (American Standard Code for Information Interchange)

The interchange code established as standard by the American Standards Association.

asynchronous

Without regular time relationships. As applied to program execution, unpredictable with respect to time or instruction sequence.

attribute, file

Any of a set of disk file characteristics established when the file is created or modified to include such integrity features as recovery, restoration, and record locking.

Autoconfigurator

The DPS 6/22 system configuration utility.

base level

(See priority level, base.)

BCB

(See Buffer Control Block.)

BCD

Binary-Coded Decimal notation.

before image

A copy of a record from a recoverable disk file, as it exists just prior to updating, written to a system recovery file.

Binary Synchronous Communications (BSC)

A communications procedure, using a standardized set of control characters and control character sequences, for the synchronous transmission of binary-coded data.

block

The logical unit of transfer between main memory and a tape file. The size of a block may be variable depending on the number of records and whether they are fixed or variable in length.

BMMU

(See MMU.)

bootstrap loader

(See loader, bootstrap.)

bootstrap routine

A routine, contained in a single record that is read into memory by a Read-Only Memory (ROM) bootstrap loader, which reads the operating system into memory. (See ROM bootstrap loader.)

bound unit

The output of one Linker execution that is placed in one file. A bound unit is an executable program consisting of a root and zero or more related overlays. The root and each overlay is also a load unit.

Bound Unit Descriptor (BUD) block

A system control structure containing information provided by the Linker to describe a bound unit.

break

A user action, initiated by pressing the break or interrupt key, that interrupts a running task so that commands can be entered. After the break, the interrupted task can be restarted or terminated.

breakpoint, bound unit

A point set in a debugging program where instructions are inserted to monitor the Executive loading process.

breakpoint, quick

A point in a program where a 02 instruction is inserted to monitor time-dependent tasks.

breakpoint, true

A point in a program where a 02 instruction is inserted to interrupt execution and activate a debugging program to monitor task execution.

broadcast

A message sent to all logged-on users through the Send Message Mailbox (SMM) command.

BSC

(See Binary Synchronous Communications.)

BUD

(See Bound Unit Descriptor (BUD) block).

Buffer Control Block (BCB)

A control structure, contained in the system pool area, which describes the characteristics of the buffer.

buffer, Input/Output (I/O)

A storage area used to compensate for the differences in the flow rates of data transmitted between peripheral devices and application program memory.

buffer pool

A collection of storage areas to which the File System assigns disk files when they are opened. Shared files are assigned to public pools in system memory. Exclusive files are assigned to private pools in task group memory (or to public pools if no private pools exist).

building, system

(See system building.)

bus

(See Megabus.)

byte

A sequence of eight consecutive binary digits operated upon as a unit.

CACL

(See Common Access Control List.)

calling sequence

A standard code sequence by which system services or external procedures are invoked.

CCP

(See Channel Control Program.)

channel

A path along which communications can be sent.

Channel Control Program (CCP)

A microcoded program that resides in the Communications Processor; the CCP processes data characters, protocol headers, and framing characters.

checkpoint

A point in your program to which control can be returned and processing resumed following a task group abort. When you take a checkpoint, the system records the current contents of your memory area and the current status of tasks, files, and screen forms on a checkpoint file. (See restart.)

checkpoint file

A file on which the system records the current status of the task group request when a checkpoint is taken. Checkpoint files are created in pairs and checkpoints are written alternately to each file.

CI

(See Control Interval.)

CIP

(See Commercial Instruction Processor.)

cleanpoint

A point in your processing at which all file updates are considered to be valid. (See also rollback.)

CLM

(See Configuration Load Manager.)

clock frequency

The line frequency, in cycles per second, that is the basis (coupled with the scan cycle) for calculating the interval between real-time clock-generated interrupts.

Clock Manager

A monitor component that handles timeslicing as well as requests to control tasks based on real-time considerations, and requests for the time of day and date in ASCII format.

Clock Request Block (CRB)

A control structure supplied by a task to request a service from the Clock Manager.

clock scan cycle

The time in milliseconds between clock-generated interrupts.

clock timer block

The control structure used by the Clock Manager to control the clock-related processing of tasks.

code, object

The code produced by a compiler or the Assembler. The object code requires further processing by the Linker to produce a bound unit. (See also object unit.)

code, source

The code or language used by the programmer when the program was written. Code that must be processed by a compiler or the Assembler and the Linker before it can be executed.

cold restart

Restart after system failure.

command

An order that is processed by the Command Processor.

command accounting

A software component used to collect command-usage data and generate a report.

command-in

Any file or device from which commands to the Command Processor are read.

command language

The set of commands that you can issue to control the execution of your task.

command level

The state of the Command Processor, when it is capable of accepting commands, optionally indicated by the display of the RDY (ready) message.

command line

A string of up to 252 ASCII characters in the form: `command_name_1 [arg_1...arg_n];command_name_2 [arg_1...arg_k] ...`, where `command_name_i` is the pathname(s) of the bound unit(s) that performs the command's function. (See argument for a description of "arg."; see &.)

Command Processor

A software component that interprets commands issued by the operator or a user, and invokes the required function.

Commercial Instruction Processor (CIP)

A processor that includes an enhanced instruction set providing native commercial mode instructions.

commercial simulator

A software component that executes a set of business-oriented instructions.

Common Access Control List (CACL)

A list specifying the access rights to all files or directories subordinate to the directory in which the list is established.

communications device

A device that transfers data over communications lines and is connected through a communications processor.

Compile Unit (CU)

A program unit, produced by a single execution of a compiler or the Assembler, that requires further processing by the Linker to produce a bound unit. (See object unit.)

concurrency

The read or write file access that the reserving task group intends for its tasks and the read or write file access that the reserving task group allows to other task groups.

configuration

The procedure that involves the use of configuration directives to define a system that corresponds to actual installation hardware.

Configuration Load Manager (CLM)

A system component that reads a file of user-supplied directives and causes the system to be configured according to the contents of the directives.

control argument

(See argument, control.)

control character

An ASCII character interpreted by a device (such as a VIP) as having a keyboard control function.

Control Interval (CI)

The unit of transfer between main memory and the storage medium (primarily disk devices); comparable to a "block" for tapes. The size is specified by the user and remains constant for a file. For disk files, the size of the CI must be a multiple of 256 bytes. A Unified File Access System (UFAS) file is composed of CIs that are numbered, starting at one. The CI also determines the buffer size.

CRB

(See Clock Request Block.)

CRT

Cathode Ray Tube. (See Visual Information Projection.)

CTB

(See Clock Timer Block.)

CU

(See Compile Unit.)

cumulative file

A third disk file utilized by Level 4 error logging. (See hold file and raw file.) Statistics contained in the raw file can be analyzed by examining the contents of the cumulative file. The cumulative file contains performance histories for each monitored device or for memory.

daemon

A system task group that manages queued print requests.

Data Base Control Block (DBCBC)

DM6 I-D-S/II working storage associated with a particular run unit containing record buffers, currencies, and other control information.

Data Base Control System (DBCS)

The DM6 I-D-S/II run-time package, which interprets Data Manipulation Language verbs, accesses the data base, and returns results to the user work area.

Data Description Language (DDL)

A nonprocedural language used to describe a data base (the schema description) or a portion of a data base (the subschema description).

data management

A File System component that handles the transfer of logical records.

DBC

(See Data Base Control Block.)

DBCS

(See Data Base Control System.)

DDL

(See Data Description Language.)

device driver

A software component that controls all data transfers to or from a peripheral or communications device. (See line protocol handler.)

Device Media Control Language (DMCL)

A nonprocedural language that describes the physical characteristics of a DM6 I-D-S/II data base including CI size, area size, data base size, and CALC header frequency.

device-pac

The adapter between a Mass Storage Controller (MSC) or Multiple Device Controller (MDC) and peripheral device (for example, printer, diskette drive).

direct access

The method for reading or writing a record in a file by supplying its key value.

direct address

The method for reading or writing a record in any Unified File Access System (UFAS) file by supplying its simple key (control interval and line number).

directive

A secondary level order read through the user-in file to a secondary processor (for example, Line Editor, Linker, Patch, Debug, and CLM (configuration) directives.)

direct login

A login that Listener performs on a terminal as soon as that terminal comes online. The login is controlled by the terminal's T-record in the Terminals File. Compare manual login.

directory

A special file containing a description of other files and/or subordinate directories.

disk

A generic name for mass storage devices such as diskette, cartridge disk, fixed (sealed) disk, and storage module.

disk cache processor

A separate processor with dedicated buffer memory that allows disk read requests to be processed at memory access speeds.

display processing

A method for developing, displaying, maintaining, and utilizing terminal display forms. (See VDAM and VISION.)

DM6 I-D-S/II

DM6 Integrated-Data-Store/II. A CODASYL-based data base management system. (See also integrated file.)

DMCL

(See Device Media Control Language.)

dope vector

A structure for passing data items not aligned on word boundaries between programs.

dormant state

The state of a task when there is no current request for that task.

Dual-Line Communications Processor (DLCP)

A programmable interface between a central processor and communications device(s) consisting of two lines.

dynamic file organization

A file whose records are organized to be accessed sequentially or directly by their record position. The main purpose of this organization is to provide efficient storage for records to be accessed through alternate indexes.

EBCDIC

Extended Binary-Coded Decimal Interchange Code.

EC file

A file containing commands and (optionally) directives. In interactive mode, an EC file typically contains frequently used command sequences. In absentee mode, an EC file must contain all commands, directives, and anticipated user responses to program messages that will be needed for a session.

Edit Profile utility

An interactive program that allows the system administrator to register new users and/or to delete, list, enhance, and change the profiles of registered users.

EFN

(See External File Name.)

EMMU

(See MMU.)

entry point

A start address within the root segment of a bound unit. By default, an entry point is the beginning of a procedure; you can specify alternate entry point by symbolic address when you invoke a bound unit.

equal name convention

A special pathname convention that can be used with certain commands to automatically construct the output pathname entry name when the input pathname entry name has been resolved.

error logging

The collecting of memory and/or hardware-related error statistics for selected peripheral devices.

error-out

The file or directive by which the system communicates error information to the user or operator; established when a group request is entered.

extent

A group of contiguous allocated sectors on a disk.

External File Name (EFN)

The absolute pathname of any file within the system. It must start with the ^ or > character. It has the form ^vol_id> dir_1>...>dir_n>filename for files on logically dismountable volumes and the form (>>dir_1>...>dir_n>filename for files on the system volume. Devices can be referred to by the sequence !sympd. (See sympd.)

external procedure

A routine that is assembled or compiled separately from the program that calls it.

FCB

(See File Control Block.)

FDB

(See File Description Block.)

FIB

(See File Information Block.)

field

A specific area of a record used for a particular category of data.

file

A named collection of one or more records.

File Control Block (FCB)

A File System data structure that controls a user's access to a file. An FCB is pointed to by an entry in the logical file table and, in turn, points to an FCB. There is one FCB per user Logical File Number (LFN) associated with a file.

File Description Block (FDB)

A File System data structure that describes a file or directory. An FDB is pointed to by an FCB for a particular file. There is one FDB per file or directory currently known (reserved) in the File System.

File Information Block (FIB)

A user-created data structure containing required information for file processing.

file management

A File System component that handles the creation, deletion, reservation, opening, and closing of files.

file name

A 1- to 12-character name assigned to a collection of related data records, or to a peripheral or communications device. For a file on disk, this name is assigned when the file is created. For devices, the name is assigned at system configuration. (See pathname.)

file organization

A method that establishes a relationship between a record and its location in a file. (See indexed, relative, random, dynamic disk, or sequential file organization.)

file recovery

Ability to bring an uncorrupted disk file to a consistent condition after a software malfunction or system failure.

file restoration

Ability to reconstruct a disk file that has been corrupted due to device fault.

file set

A number of tape volumes used to contain one or more files. There are four types of tape volumes:

1. Monofile Volume - Contains only one file
2. Multivolume File - Contains one file on two or more tape volumes
3. Multifile Volume - Contains more than one file on one volume
4. Multivolume Multifile - Contains more than one file with any file spanning more than one volume.

File System

System software consisting of file, data, and storage management components that handles Input/Output (I/O) functions of the supported I/O devices.

First-In/First-Out (FIFO)

An execution or scheduling algorithm in which the first item received is the first item processed.

fixed-length record

A record stored in a file in which all of the records are the same length.

floatable overlay

An overlay that can be loaded into any available memory location within a task group's memory pool.

form

A display terminal screen that provides areas (fields) into which you enter information that defines a function to be carried out.

full duplex

Simultaneous independent transmission of data in both directions.

full pathname

An absolute pathname which, when specified, begins with a circumflex (^) (for example, the root directory.)

function

A procedure that returns a single value to its caller. (See subroutine.)

globally shareable bound unit

A bound unit containing reentrant code and linked with the GSHARE directive. A globally shareable bound unit is loaded in the system pool and can be used by any task in the system.

GMT

Greenwich Mean Time (also referred to as universal time).

group control block

A system structure describing attributes of a task group.

group_id

(See task group identification.)

group system space

An area of memory (segment) that contains the system control structures used to support a task group and its tasks in a swap pool.

group work space

An area of memory (segment) from which tasks in a swap pool obtain blocks of memory.

GRTS

General Remote Terminal Supervisor.

half duplex

Transmission of data in one direction at a time.

High Memory Address (HMA)

The address of the highest physical memory location in the central processor.

HMA

See High Memory Address.

hold file

A file that contains a copy of the Level 2 or Level 4 error logging statistics that are stored in memory. The hold file can be retrieved after system shutdown or crash.

home directory

Your initial working directory after logging in.

hot restart

Restart during a session.

I pool

(See independent memory pool.)

IMA

(See Immediate Memory Addressing.)

Immediate Memory Addressing (IMA)

A form of addressing a location in main memory by referencing the location directly, indirectly, or through direct or indirect indexing.

independent memory pool

A fixed partition memory pool. All tasks executing in a specific independent memory pool share a common virtual view consisting of all memory assigned to that pool and system global memory.

indexed file organization

A disk file whose records are organized to be accessed sequentially in key sequence or directly by key value.

indirect extent

The field in a directory record that holds the relative volume number that contains the succeeding set of extents.

Indirect Request Block (IRB)

(See Intermediate Request Block.)

Input/Output (I/O) device

A peripheral or communications device.

Input/Output Request Block (IORB)

A control structure used for communication between a program and an I/O driver outside of the File System.

integrated file

A data base disk file whose records are accessed directly or sequentially using CALC keys and key values.

interactive

A processing mode characterized by a dialog between you and the system during execution of your program.

interactive task

A task, which, when invoked, is under real-time control of user-specified directives.

Intermediate Request Block

A control structure used by the system to queue and record status and control information developed from user request blocks; also known as Indirect Request Blocks.

international graphics

ASCII characters whose hexadecimal equivalents are C0 through FF.

interrupt

The initiation, by hardware, of a routine intended to respond to an external (device-originated) or internal (software-originated) event that is either unrelated, or asynchronous with, the executing program.

Interrupt Save Area (ISA)

An area used to store the context of an interrupted task. There is one ISA for each task in memory.

interrupt vector

A pointer to a priority-level-specific memory area called an ISA. There is one vector for each priority level, each having a dedicated memory location.

Intersystem Link (ISL)

A hardware element interconnecting two buses, thereby permitting the same functions between two units on different buses as between two units on the same bus.

IORB

(See Input/Output Request Block.)

ISA

(See Interrupt Save Area.)

ISL

(See Intersystem Link.)

journal file

A system file that contains a running summary of all changes made to all disk files designated as restorable.

key

An identifier for a specific record within a disk file.

keyword

A fixed-form character string preceded by a hyphen (for example, -ECL). It can stand alone (for example, -WAIT) or can be followed by a value (for example, -FROM n).

KSR

A Keyboard Send-Receive teleprinter.

KSR-like terminal

A KSR teleprinter, CRT keyboard, or Visual Information Projection (VIP) terminal, which supports the Teleprinter (TTY*) protocol and is connected to the MDC, MLCP, or DLCP.

language key

A two-ASCII-character identifier used as a file name suffix to provide multiple national language support. The system default language key is specified at CLM time with the system default message library pathname.

lead task

The controlling task of a task group. The lead task can invoke other tasks to perform functions on its behalf (for example, system services).

LFN

(See Logical File Number.)

LFT

(See Logical File Table.)

line

A record stored in a Series 60-compatible file.

line number

The relative position of a logical record within a control interval (CI). Line numbers start at zero for each CI.

Line Protocol Handler (LPH)

A communications program that processes messages, interrupts, and timeouts; handles protocol acknowledgment and error recovery; initializes the channel control program.

link

(1) A process by which the Linker program combines separately compiled object units to produce a bound unit. (2) A communications channel between two modems. (3) A name that refers to a File System entity. A link establishes an additional pathname to a file, directory, or index in another volume or directory so that it can be referenced as if it were contained in the specified directory.

Linker

A utility program that links one or more object units into a single machine language relocatable unit.

Listener

A system control component that allows you to access the system through a selected set of terminals by means of Login commands.

load unit

A discrete program unit that has been compiled or assembled and linked. It is in machine language and is directly loadable by the Executive. See bound unit.

Loader

A system control software component that dynamically loads from disk the root and overlays of a bound unit.

Loader, bootstrap

A utility program, usually permanently resident in main memory, that enables other programs to load themselves.

Logical File Number (LFN)

An internal identifier that becomes associated with a file when it is reserved. LFNs are used in all file references until the file is removed.

Logical File Table (LFT)

A data structure for use by the File System. It contains an entry for each LFT.

Logical Resource Number (LRN)

An internal identifier used to refer to tasks or devices.

Logical Resource Table (LRT)

A data structure within a task group containing an entry for each LRN used in an application, or a data structure within a system task group containing an entry for each LRN representing a device. Each entry is a pointer to the Resource Control Table (RCT).

Login

A command entered at a terminal monitored by Listener that is used to gain access to the system. The Login command spawns a task group to be associated with your terminal for a primary login or passes you to an existing task group for a secondary login.

login abbreviation

A one-character typein that is defined in the terminals file as an abbreviation for a complete login line. A login abbreviation may apply only to a specific terminal or may be used at all terminals in the system.

login identification (login id)

A string that identifies a registered user of the system for purposes of login only. It contains no periods (.); uppercase and lowercase characters are distinct (JONES and Jones are different login ids).

login parameters, default

Login line parameters stored in your user profile. When you log in, these parameters are combined with arguments from the terminals file and/or arguments entered manually at login time to form the actual login line.

LPH

(See Line Protocol Handler.)

LRN

(See Logical Resource Number.)

LRT

(See Logical Resource Table.)

mail

Data that is accompanied by routing information and is contained in a mailbox.

mailbox

A special file that may contain data to be communicated to another task group (user).

manual login

The procedure by which you enter a login line or fill out a login form in order to log in at a terminal. Compare direct login.

MBZ

Must Be Zero.

MDC

Multiple Device Controller for peripheral devices other than cartridge disk, storage module, and magnetic tape.

Megabus

A set of parallel conducting paths connecting various hardware units of a computer.

memory dump

The representation of the contents of memory.

Memory Management Unit (MMU)

A hardware feature that intercepts all addresses generated by the Central Processor Unit (virtual addresses) and transforms them to real memory addresses via its mapping array. There are two types of memory management units, the basic memory management unit (BMMU) and the extended memory management unit (EMMU).

Memory Manager

A system control software component that controls dynamic requests to obtain/return memory from/to a memory pool.

memory pool

A block of central processor memory from which a task group obtains memory as required for executable code, control structures, and I/O buffers. (See swap, independent, or system pool.)

memory save and autorestart unit

A hardware feature that can preserve the memory image through a power failure lasting up to 2 hours.

menu

A display on a terminal screen that lists two or more selections from which you can make a choice.

Menu Processor

A software component that interprets commands issued through the User Productivity Facility, and invokes the required function.

menu subsystem

A system facility that enables you to access all system components through menus and forms.

message

A communication of text that is to be displayed immediately at the receiving user's terminal.

message facility

A system component that provides a means for intertask and intergroup communications.

message reporter

A system component that extracts messages from the message library, formats them, and delivers them to a user task.

MLCP

(See Multiline Communications Processor.)

MMU

(See Memory Management Unit.)

MSC

Mass Storage Controller for cartridge disks or storage modules.

MTC

Magnetic Tape Controller for magnetic tapes.

Multiline Communications Processor (MLCP)

A programmable interface between a central processor and one or more communications devices. Can be programmed to handle specific communications devices.

multiprogramming

An operating system capability that allows the concurrent execution of tasks from more than one task group.

multitasking

An operating system capability that allows the concurrent execution of more than one task in one or more task groups.

multivolume set

A number of disk volumes that contain one or more files. An online multivolume set allows data for a single file to be distributed over many volumes. It requires that all volumes be mounted and available for the file to be used. A serial multivolume set permits sequential files to extend onto other volumes. The volumes can be mounted one at a time and can be used for very large sequential files.

NATSAP

Next Available Trap Save Area Pointer.

nonfloatable overlay

An overlay that is loaded into the same memory location relative to the root each time that it is loaded.

OAT

(See Overlay Area Table.)

object unit

A relocatable program unit produced by a single execution of a language compiler, or by the Assembler, and requiring further processing by the Linker to produce a bound unit.

OIM

(See Operator Interface Manager.)

OIM log

A system facility that is used to capture all traffic on the operator's console.

online

An execution environment intended for use by application programs, including those operating in real time.

online task group

A task group that executes in the online dimension; its resources are a memory pool and the peripheral devices it requests.

operating system area

The memory area containing operating system software, user-written extensions to the operating system, and device drivers.

operator

Person who starts up the system each day, controls processing, manages peripheral devices, monitors system states, and regulates absentee jobs.

operator commands

The set of commands that can be issued by the operator to control execution.

Operator Interface Manager (OIM)

A system control software component that manages all messages sent simultaneously by multiple task groups to the operator terminal or from the operator terminal to a task group.

operator-out

The file or device by which an interactive command communicates with the system operator; established at system initialization or when a File Out command is issued.

operator terminal

The device configured as LRN 0. The operator terminal is used for communication between the operator and system task groups.

overlay

A section of a program that can be loaded during execution to overlay another section of the program. Used when there is insufficient memory to accommodate all the code of a program. (See floatable overlay and nonfloatable overlay.)

overlay area

An area of specified size into which floatable overlays are loaded.

Overlay Area Table (OAT)

A data structure containing parameters that control the use of overlay areas.

pacing rate

The frequency at which each new output line appears on an output display.

parameter

The data received by a procedure that is written in a generalized form to handle any data passed to it. See argument.

password

A unique combination of characters that identifies you to the system. A system control component verifies the password before granting access to the system.

patch

A portion of code used to modify an existing object or load unit on disk or in memory.

pathname

A character string by which a file, directory, or device is known in the File System.

pathname, absolute

A pathname that begins with a greater-than sign (>) or a circumflex (^). In the former case, it is a partial pathname and is appended to the root directory name of the system volume to form a full pathname; in the latter case, it is a full pathname and is used without modification.

pathname, device

A pathname by which reference is made to a peripheral device. Device pathnames have the general form !device_id.

pathname, relative

A pathname that does not begin with a greater-than sign (>) or a circumflex (^). It is a partial pathname consisting of one or more directory names and/or a file name, and is appended to the working directory pathname to form a full pathname.

pathname, simple

A special form of a relative pathname consisting of a single directory name or file name. It is appended to the working directory name to form the full pathname.

peripheral device

A device connected through the MDC, MSC, or MTC (for example, a card reader, disk, or tape).

Physical Input/Output (PIO)

Physical Input/Output, or physical I/O, that is initiated through a request I/O macrocall, outside of the File System, using IORBs.

PIO

(See Physical Input/Output.)

pipe

A special kind of sequential file used for synchronizing and passing information among multiple cooperating tasks.

pool identifier

A two-character name, established a system configuration, by which a memory pool is identified, and by which a task group is assigned a memory pool when the task group is created.

positional argument

(See argument, positional.)

power resumption

A system facility that controls the restarting of the execution environment following a power failure.

primary login

The form of login that requests Listener to spawn a task group that has the terminal from which the login originated as its primary system file (the terminal will be the initial user-in, command-in, error-out, and user-out files).

priority level

A numeric value that can be assigned to a task or device for purposes of controlling processing. Values range from 0 to 63. The lowest values (highest priorities) are reserved for system tasks; level 63 is the system idle level. Intermediate levels are available for user assignment to tasks and devices. The physical level at which a task executes is the sum of the highest level number assigned to a configured device plus four, the base level of the task group, and the relative level of the task within the group.

priority level, base

The priority level, relative to the system priority level, at which all tasks in a task group execute. A base level of 0 is the next higher level above the last (highest) system priority level.

priority level, hardware

A numeric value from 0 through 63 that can be assigned to a task or device to control processing. The lowest values (highest priorities) are reserved for certain system tasks. Level 62 is reserved for user tasks. Level 63 is the system halt level.

priority level, physical

(See priority level.)

priority level, relative

The priority level, relative to the base level, at which a user task within a task group executes. Relative Level 0 is the base level.

priority level, system

The priority level assigned to system devices and tasks.

profile

(See report queue profile file or user profile.)

program name suffixes

A "point-letter" character string such as ".O" for object units or ".A" for Assembly language source units appended to a file name to identify it as a source, object, or list unit.

protected string

A character string containing reserved characters that is enclosed by protected string designators. (See reserved character and protected string designator.)

protected string designator

A pair of quotation marks or apostrophes that enclose a character string containing reserved characters. (See reserved character.)

PVE

Polled Visual Information Projection (VIP) Emulator.

quarantine unit

A unit of message text; the smallest amount of transmitted data that is available to the receiver.

query

A collection of command statements that causes a query processor to examine a file (or data base) and produce a written report.

random file organization

A disk file whose records are accessed directly or sequentially through CALC keys and key values.

range

The number of bytes transferred during an I/O operation.

raw file

A second disk file utilized by Level 4 error logging. The raw file maintains a cumulative performance record for memory and/or each device being monitored.

record

A user-created collection of logically related data fields. Records are treated as units and can be fixed or variable in length.

record locking

A file access feature that controls contention for records within disk files shared by two or more task groups.

recoverable file

A disk file that has been identified as one that can be brought back to a previously established state in the event of a software malfunction or system failure. (See before image and file recovery.)

recovery file

A system-created file used to contain before images. (See before image.)

reentrant routine

A routine that does not alter itself during execution; a reentrant routine can be entered and reused at any time by any number of callers.

registration

Process by which the system administrator introduces users into the system.

Glossary

relative file organization

A file whose records are organized to be accessed sequentially or directly by their record position relative to the beginning of the file.

relative level

(See priority level, relative.)

relative record number

A number representing the position of a record relative to the beginning of the file. The initial record is relative record number 1.

remote file access

A File System facility that allows applications to access remote data as if it were local.

report queue

A directory used to contain the pathnames of files queued for later transcription.

report queue profile file

A file that designates the characteristics of reports that will be entered in a report queue and printed or punched at a later time.

report spooling

The queuing and subsequent transcription of reports.

request block

(See Input/Output Request Block (IORB), Task Request Block (TRB), Clock Request Block (CRB), and Semaphore Request Block (SRB).)

request I/O

The macrocall, issued to a driver, that performs Physical I/O (PIO).

request queue

A threaded list of request blocks.

reserved character

An ASCII character to which special significance is attached. These characters are: space (blank), horizontal tab, quotation mark ("), apostrophe ('), semicolon (;), ampersand (&), vertical bar (|), left bracket ([), and right bracket (]).

resident bound unit

A bound unit that is permanently configured in memory as an extension to the operating system.

residual range

The difference between the number of bytes requested and the number of bytes transferred during an I/O operation.

Resource Control Table (RCT)

A system structure that controls task processing.

restart

A user-initiated process in which the system locates the most recently completed checkpoint on the checkpoint file and reads the checkpoint image, rebuilding the Executive data structures and memory blocks, reloading bound units, and repositioning active user files. (See checkpoint.)

restorable file

A disk file that has been identified as one that can be reconstructed to its latest state following a device fault. (See after image and file restoration.)

return address

The address of the instruction in a program to which control is returned after a call to a subroutine. By convention, this address is usually stored in register B5.

RFU

Reserved for Future Use.

ring

A mechanism used to establish access rights to a segment. Also an attribute of a memory pool.

rollback

The process by which before images stored on a recovery file are written to a recoverable file, negating updates made since the last cleanpoint. This action restores the file to the state it was in when the cleanpoint was taken. Also see cleanpoint, before image, file recovery, and recoverable file.

ROM bootstrap loader

A firmware routine (activated by pushing the Load key on the control panel) that reads the first record from a designated disk into memory.

root directory

The primary directory on a mass storage volume; it is pointed to by the root directory pointer in the volume label. The name of the root directory is the same as the vol_id. MOD 400 supports a User Root Directory (URD) and a System Root Directory (SRD), which may reside on different volumes.

root segment

The controlling segment of a program. It is resident in memory during the entire execution of the program and can call overlay segments.

ROP

Receive-Only Printer.

RSU

Reserved for System Use.

Scientific Instruction Processor (SIP)

A processor that executes a set of scientific instructions.

search rules

An ordered list of directories searched by the system when a bound unit is to be located and loaded or executed.

secondary login

The form of login that requests the Listener to transfer control of your terminal to a specified task group. The specified task group must already exist and have an outstanding Request Terminal monitor call (\$RQTML) for the secondary login to satisfy.

secondary user

A user whose login line contains a destination, which is the identification (usually by group-id) of a subsystem that has requested a secondary terminal. The user is attached to the subsystem until released by it.

sector

A 128-byte portion of a diskette track, or a 256-byte portion of a diskette, cartridge disk, cartridge module disk, or storage module track.

security

Limitation and control of the type of access a user has to directories, files, and the system itself.

segment

A logical entity containing a bound unit root and zero or more additional load elements, or containing one or more overlays.

semaphore

A software counter mechanism, available to Assembly language programs, and used to coordinate the use of task code or other resources such as files.

Semaphore Request Block (SRB)

A data structure used to control semaphore processing.

sequence number

The internal identification number assigned to a request in a task group request queue.

sequential access

The method of reading or writing a record in a file by requesting the next record in sequence.

sequential file organization

A file on disk or magnetic tape whose records are organized to be accessed in consecutive order.

shareable bound unit

A transient bound unit consisting of reentrant code linked with the share directive. A shareable bound unit is available for execution by any task assigned to the same memory pool.

shareable file

Any file that is usable by more than one task concurrently.

SIP

(See Scientific Instruction Processor.)

SIP Simulator

A software component that provides the same functionality as the SIP.

SLCT

System Local Clock Time (the time at the place at which the system is located).

source unit

A program written in source language for processing by a compiler or an assembler. Source units are stored as variable sequential data files.

spanned record

A record that spans a control interval or block.

spawn

To create, request the execution of, and then delete a task or task group.

spooling

The technique for storing output on disk files for subsequent printing or punching.

SRB

(See Semaphore Request Block.)

standard I/O files

The command-in, user-in, user-out, operator-out, and error-out files.

star name convention

A special pathname convention that can be used with certain commands to perform an operation on a group of files, thereby eliminating the need for separate commands for each file.

startup

The procedure that bootstraps a vendor-supplied, preconfigured system from disk to provide a minimum operating environment.

startup EC file

An EC file whose commands are executed at system startup or when a task group is activated.

states (task)

A task can be in the following states: Dormant, Active, Wait, and Suspend.

storage management

The File System component that handles the transfer of blocks and control intervals between main memory and secondary storage (for example, disks, tapes, etc.).

subroutine

Any procedure that alters data in an area common to both the subroutine and its caller. Contrast with "function".

subsystem

A general purpose application-oriented facility that provides interactive users with their interactive capabilities and view of the system. A subsystem is generally identified directly with the lead task of a task group. A subsystem can either be primary-user oriented (supporting one interactive user per task group) or secondary-user oriented (supporting multiple interactive secondary users per task group).

subsystem switcher

A menu-oriented component of the user productivity facility that allows a logged in user to switch from one subsystem to another without having to log out and back in again.

suspend

An operator action resulting in the temporary cessation of execution of a task group; all resources are retained by the task group. (See activate.)

swap pool

A memory pool in which segmented memory management is used. Tasks assigned to a swap pool can be swapped to backing storage in order to make memory available to competing tasks. Each task executing in a swap pool has its own virtual view. The system allows multiple swap pools to be assigned.

Swapper

A system component that controls the allocation of swap pool memory and swap file space.

symbolic start address

Bound unit entry point.

sympd

A name assigned to each peripheral device when the system is built. The acronym sympd stands for "symbolic peripheral device."

system building

The process of specifying system variables, identifying the peripheral devices and (optional) communications environment to the system, and tailoring main memory to suit system and user needs.

system console

(See operator terminal.)

system directory

One of the directories that the system uses in its search for a bound unit to be loaded for execution.

system global space

The memory of the fixed system area and the system. This memory is in the virtual view of all tasks, regardless of their specific memory pool assignments.

system pool

The memory area from which the system task group (GCB and TCB) and system global structures (for example, BCB and FDB) are allocated, and the area where globally shareable bound units reside.

system service macrocalls

Macrocalls available to Assembly language programs to perform a wide variety of system control and File System service functions.

system task group

The task group in which all drivers, the clock, the Command Processor, and OIM execute.

task

A sequence of instructions that has a starting point, an ending point, and performs some identifiable function.

task address space

The boundaries of a task in a swap pool. Consists of bound units, user stack segment, dynamically created segments, group work space, group system space, and system global space.

Task Control Block (TCB)

The system control structure that describes the task's characteristics, including the contents of the hardware Interrupt Save Area (ISA).

task group

A named set of one or more tasks with a common set of resources; the framework within which every user and system function operates.

task group identification

A two-character name by which a task group is known to the system.

task group resource

One of a set of elements associated with a task group that enables it to perform its function. A resource can be a task, a central processor priority level, central processor memory, or a peripheral or communications device.

Task Manager

A system component that handles task requests to activate, wait, or terminate tasks.

Task Request Block (TRB)

A data structure used by one task to request another task and communicate with it.

TCB

(See Task Control Block.)

terminal

An I/O device.

terminals file

A sequential file that names the terminals monitored by Listener, defines terminal-specific access constraints, and defines system-wide and terminal-specific abbreviations for login lines.

terminate

A system service macrocall request issued by the currently executing task at the end of its normal processing.

terminated

A task state in which there is no current request for the task.

timeslicing

An optional feature that minimizes the ability of tasks that use large amounts of central processor time to interfere with interactive users.

transaction

An event that is entered, recorded, and processed by the system.

transaction processing

Online data processing in which individual transactions are entered from terminals, validated, and processed through all relevant procedures.

transient bound unit

A bound unit that resides in memory as long as there is a request for it.

transparent mode transmission

A data transmission mode that allows data consisting of bytes having any bit configuration to be transmitted over communications lines. Thus, control characters can be transmitted as data.

trap

A control transfer caused by an executing program. The transfer is made to a predefined location in response to an event that occurs during processing.

trap handler

A routine designed to take a particular action in response to a specific trap condition.

Trap Manager

A system control software component that handles an executing program's transfer of execution control to a predefined trap location.

Trap Save Area (TSA)

An area in memory in which certain information is stored when a trap occurs.

trap vector

A pointer to a trap handler. There is one vector for each possible trap condition, in dedicated memory locations.

TRB

(See Task Request Block.)

TSA

(See Trap Save Area.)

UFAS

(See Unified File Access System.)

Unified File Access System (UFAS)

A file organization developed to provide a predictable relationship between records and their location in the file. UFAS files are transportable across all levels of Honeywell Bull software.

unit control character

(See control character.)

user

An entity that can make demands upon the system; can be a logged-in person, a system routine such as a daemon, etc. A person logged in under two accounts is considered to be two users for system loading purposes.

user identification (user id)

A string that identifies the current user of a task group. It consists of two or three parts: person.account[.mode]. Uppercase and lowercase letters are treated the same (JONES.ADMIN and Jones.Admin are treated the same).

user-in

The file or device from which a command function requiring directives (for example, the Line Editor) reads its input; it is established when the group request is made. User programs can also read from this file.

user-out

The file or device by which an interactive command communicates with the user; established when a group request is made, or a File Out command is issued. User programs can also write to this file.

User Productivity Facility

A MOD 400 interface that allows you to create menus and to generate system commands through menus and forms.

user profile

The user's registration information as maintained by the system administrator using the Edit Profile utility. The user profile establishes a login id and a unique password capability for each user, as well as other privileges and/or limitations granted to specific users.

user registration

A mode of MOD 400 operation that maintains a file of registered users that specifies their login defaults and individual access rights. For definitions of terms related to user registration, see the Glossary in the *System Building and Administration* manual.

user stack segment

A work area available through hardware stack instructions.

variable-length record

A record stored in a file in which records have different lengths.

VDAM

A system component that allows you to display and use forms.

VIP

(See Visual Information Projection.)

virtual view

A virtual view consists of all of the memory pools to which a task executing within the view has access. A virtual view consists of one of the following combinations of memory pools:

- o The system pool and an independent pool.
- o The system pool and a swap pool.

VISION

A system component that allows you to develop and maintain forms.

Visual Information Projection (VIP)

VIP devices consist of a screen (CRT) and keyboard. Hard-copy receive-only printers can be added to some models.

vol_id

(See volume identifier.)

volume

A fixed or removable storage unit (for example, storage modules, diskettes, cartridges, tapes) that may contain one or more files.

volume header

A unique record at the beginning of every disk or magnetic tape volume that carries information about the volume.

volume identifier (vol_id)

The unique name for a disk or magnetic tape volume that is contained in the volume header.

volume name

(See root directory.)

volume set

A number of disk volumes that contain one or more files. Online volume sets require that all volumes are mounted and are available for use. Serial volume sets can be mounted one volume at a time.

wait

A task is in the wait state when it causes its own execution to be interrupted until a time request is satisfied, until another task releases a semaphore, until another task terminates, or until an I/O operation terminates.

word

A sequence of 16 consecutive binary digits operated upon as a unit; two consecutive bytes.

working directory

A disk directory pathname associated with a task group. It begins with a root directory name and contains zero or more intermediate directory names. It is used by the File System software to construct a full pathname whenever a task group refers to a relative or simple pathname.