

Glossaries

A. Definitions pertaining to a “Mainframe” System Environment:

(Items within {} indicate Author’s Notes separate from Quoted Definitions)

Mainframe – A computer, usually in a computer center, with extensive capabilities and resources to which other computers may be connected so that they can share facilities. *(IBM Dictionary of Computing)*

Time Sharing – A method of using a computing system that allows a number of users to execute programs concurrently and to interact with the programs during execution. *(IBM Dictionary of Computing)*

Time Sharing System (TSS) – A programming system that provides users with conversational online access to a computing system with one or more processing units and simultaneously processes batched jobs. {See below under “Batch Mode” – Author.} *(IBM Dictionary of Computing)*

Terminal – A device, usually equipped with a keyboard and display device, capable of sending and receiving information. Note: The terms *terminal* and *workstation* are often used interchangeably. *(IBM Dictionary of Computing)*

Session – The period of time during which a user of a terminal can communicate with an interactive system, usually, elapsed time between logon and logoff.

Logon – The procedure by which a user begins a terminal session. **Log On** – To initiate a session. Synonymous with **Log In**. *(IBM Dictionary of Computing)*

Log In – To begin a session with a remote resource {in our case, a UNISYS mainframe}. The act of identifying oneself as authorized to use a resource. Often the system requires a user ID {identification} and password to check authorization to use the resource. *(IBM Dictionary of Computing)*

Logoff – The procedure by which a user ends a terminal session. **Log Off** – To end a session. Synonymous with **Log Out** {and “Sign Off”} *(IBM Dictionary of Computing)*

Data Set – The major unit of data storage and retrieval, consisting of a collection of data in one of several prescribed arrangements and described by control information to which the system has access. See also **File**. *(IBM Dictionary of Computing)*

File – A collection of information treated as a unit. A collection of related data that is stored and retrieved by an assigned name. *(IBM Dictionary of Computing)*

Partitioned Data Set (PDS) – A data set in direct access storage {such as a magnetic disk} that is divided into partitions, called **members**, each of which can contain a program, part of a program, or data. *(IBM Dictionary of Computing)*

Library – (1) A file or a set of related files; for example, in stock control, a set of inventory control files. (4) A data file that contains files and control information that allows them to be accessed individually. (5) A named area on disk that can contain programs and related information (not files). A library consists of different sections, called **library members**. (7) In {mainframe system timesharing & batch mode}, any partitioned data set (PDS). *(IBM Dictionary of Computing)*

Batch Mode – While logged into a multi-user system (usually a mainframe), pre-writing the commands necessary to perform various individual instructions, saving them in a file, then instructing the computer system to execute the commands stored in this file, and to perform these pre-written commands on a “scheduled” basis – i.e.) perform the pre-written commands of one user, then put that aside, then perform the pre-written commands of another user, and so on until there are no more user tasks to perform in this mode.

This differs from what most of us know as “*online*”, where one types a command or indicates an on-screen icon or button and the “command(s)” are performed immediately. In other words, an online mode of operation gives one

instant gratification and response, whereas operating in a “batch” mode means one has to wait for the computer system to get around to performing one’s desired tasks.

Job – In Batch Mode Processing – The overall task that needs to be done in one session of time, i.e.) what the complete set of pre-written commands (mentioned under the “batch mode” definition) is supposed to accomplish overall. In other words, ONE “JOB” = ONE FILE (of stored pre-written system commands).

Submit – In Batch Mode Processing – The action of instructing a multi-user system to take the pre-written commands stored in a file (that represents one “JOB”) and to schedule these for execution, based on some type of priority and waiting list of “batch mode jobs” to execute.

ECL = Exec Control Language – On a UNISYS mainframe, the allowable set of commands, which the USER (programmer) pre-writes into a FILE, that are used to describe all the various tasks and allocations to perform one entire JOB. These commands are obviously available in various UNISYS technical manuals, etc.

ECL File (Dataset) – On a UNISYS mainframe, a file (dataset) that contains all the pre-written ECL commands necessary to submit and execute ONE JOB in batch mode processing.

PROC (UNISYS COBOL) –The equivalent of an “include” (or header) file (as used in C, C++, Pascal, and other, similar PC-based programming languages). COBOL PROC datasets usually contain either (a) various declarations (for files/datasets, databases, variables, etc.) or (b) actual procedures (executable program statements). These PROC datasets are usually kept in libraries separate from main COBOL program source.

B. Definitions pertaining to “Multiple-System” and “Network” Environments:

Below is given a number of “key” definitions having to do with multiple systems and networks of computers.

Local Area Network (LAN) – A computer network located on a user’s premises within a limited geographical area. Communication within a local area network is not subject to external regulations; however, communication across the LAN boundary may be subject to some form of regulation. (See also Wide Area Network, or WAN.) (*IBM Dictionary of Computing*)

File Server (or just “**Server**” for short) – A high-capacity disk storage device or a computer that each computer on a network can use to access and retrieve files that can be shared among the attached computers.

Note: Access to a file is usually controlled by the file server’s software rather than the operating system of the computer that accesses the file. (*IBM Dictionary of Computing*)

Host Computer – (1) In a computer network, a computer that usually performs network control functions and provides end users with services such as computation and database access. (2) The primary or controlling computer in a multiple computer installation. (*IBM Dictionary of Computing*)

Host – In TCP/IP, any system that has at least one Internet address associated with it. A host with multiple network interfaces may have multiple Internet addresses associated with it. (*IBM Dictionary of Computing*)

Example: At ABC Inc., the host has **abc.com** as its Internet address, so that someone who has the user name of **joeblow**, would usually get e-mail addressed to them via the complete Internet address **joeblow@abc.com**.

TCP/IP (Transmission Control Protocol / Internet Protocol) – A large family of protocols used to organize computers and communication devices into a network. The two most important protocols are **TCP** and **IP**. IP (Internet Protocol) transmits the data from place to place, while TCP (Transmission Control Protocol) makes sure it all works correctly. (*The Internet Complete Reference, Second Edition*)

Protocol – A set of rules describing, in technical terms, how something should be done. For example, there is a protocol describing exactly what format should be used for sending a mail message. All Internet mail programs follow this protocol when they prepare a message for delivery. (*The Internet Complete Reference, Second Edition*)

Client-Server – In TCP/IP, the model of interaction in distributed data processing in which a program at one site sends a request to a program at another site and awaits a response. The requesting program is called a **client**; the answering program is called a **server**. (*IBM Dictionary of Computing*)

Distributed Processing (synonymous with **Distributed Data Processing**) – (1) Data processing in which some or all of the processing, storage, and control functions, in addition to input/output functions, are dispersed among data processing stations. (2) Processing that takes place across two or more linked systems. (*IBM Dictionary of Computing*)

FTP = File Transfer Protocol – One of the many protocols that are part of the TCP/IP family, the **ftp** service allows you to copy files from one computer to another. For security reasons, you cannot copy files between two computers unless you can log in to the remote computer {from the computer you are on already}. When you do, you are asked to enter a userid and password for the {remote} computer. Once your password is validated, the connection is established. You can now use your **ftp** client {program} to copy files in either direction. (*The Internet Complete Reference, Second Edition*)

Terminal – (1) A functional unit in a system or communication network at which data may enter or leave. (2) A point in a system or communication network at which data can either enter or leave. (3) A device, usually equipped with a keyboard and display device, capable of sending and receiving information. (*IBM Dictionary of Computing*) {Author's Note -- Generally, prior to PC's entering the picture, these were separate devices which were in themselves not computers. They were usually connected to mainframes and had communication with the mainframe as their primary purpose. Certain "smart" terminals had local text editing/memory features.}

Terminal Emulator – A program that allows a device such as a microcomputer or personal computer to enter and receive data from a computer system as if it {the PC} were a particular type of attached terminal. See also **download** and **upload**. (*IBM Dictionary of Computing*)

Download – (1) To transfer programs or data from a computer to a connected device, typically a personal computer. (2) To transfer data from a computer to a connected device, such as a workstation or microcomputer. Contrast with **upload**. (*IBM Dictionary of Computing*)

Upload – (1) To transfer programs or data from a connected device, typically a personal computer, to a computer with greater resources. (2) To transfer data from a device, such as a workstation or microcomputer, to a computer. Contrast with **download**. (*IBM Dictionary of Computing*)

MS-DOS Window – In **MS Windows '95** (MS = Microsoft), a window that allows the user to run in **MS-DOS Mode** without exiting Windows '95 (and of course since Windows is still running, you can switch to other applications and windows that are running concurrently).

In essence, since Windows '95 is already running in addition to MS-DOS (which starts up first when you boot up your system), this window is a **DOS Shell** program, giving the user "access" to DOS "through Windows".

Shell Program – A program that accepts and interprets commands for an operating system. See also **shell**. (*IBM Dictionary of Computing*)

Shell – A software interface between a user and the operating system of a computer. Shell programs interpret commands and user interactions on devices such as keyboards, pointing devices, and touch-sensitive screens and communicate them to the operating system. Shells simplify user interactions by eliminating the user's concern with operating system requirements. A computer may have various layers of shells for various levels of user interaction. (*IBM Dictionary of Computing*)

[End of Sample.]