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NF01-459 Internet/World Wide Web Glossary of Terms

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Internet/World Wide Web Glossary of Terms

Applet - A small java program can be embedded in an HTML page. Applets differ from full-fledged java applications in that they are not allowed to access certain resources on the local computer, such as files and serial devices (modems, printers, etc.), and are prohibited from communicating with most other computers across a network. The current rule is that an applet can only make an Internet connection to the computer from which the applet was sent.

Baud - In common use the baud rate of a modem is how many bits of information it can send or receive per second. Technically, baud is the number of times per second that the carrier signal shifts value - for example a 1,200 bit-per-second modem actually runs at 300 baud, but it moves 4 bits per baud (4 x 300 = 1200 bits per second)

Binary - Computers use a binary number system, a sequence of ones and zeroes that tell the computer's switches to turn off ("0") and on ("1").

Binary file - A non-ASCII file, such as a database or executable program, that contains data that is not text and therefore cannot be printed. An ASCII file is a 7-bit format. Applications, such as word processing programs, produce files that have 8-bit data. A binary file can only be sent by e-mail by encoding it as a text file with a program such as unencode or BinHex. You can download a binary file with the FTP binary command.

Bookmark or favorites - A feature to store in your computer links to sites you wish to return to.

Boolean logic - It is a way to combine terms using "operators" such as "AND", "OR", "AND NOT" and sometimes "NEAR". AND requires all terms appear in a record. OR retrieves records with either term. AND NOT excludes terms. Parentheses may be used to sequence operations and group words. Always enclose terms joined by OR with parentheses.

BPS (bits per second) - A measurement of how fast data is moved from one place to another. A 28.8 modem can move 28,800 bits per second.

Browser - Browsers are software programs that enable you to view World Wide Web documents. This software must be installed on your computer. Examples of browsers include Mosaic, Netscape, Lynx,

Microsoft Internet Exporer, Macweb, and Netcruiser. Browsers are able to interpret URLs and HTML formatted documents and understand several Internet client-server protocols, such as HTTP and FTP.

Cache - Temporarily stores web pages most recently visited in your computer. A copy of documents you retrieve is stored in cache. When you use GO, BACK, or any other means to revisit a document, the browser first checks to see if it is in cache and will retrieve it from there be is because it is much faster than retrieving it from the server. If memory allocated to cache in your computer becomes full, your browser discards the oldest documents. You can change the capacity of your cache, although larger cache may affect other operations and is limited by the memory capacity of your computer.

CGI (Common Gateway Interface) - A set of rules that describe how a web server communicates with another piece of software on the same machine, and how the other piece of software (the"CGI program") talks to the web server. Any piece of software can be a CGI program if it handles input and output according to the CGI standard.

Usually a CGI program is a small program that takes data from a web server and does something with it, like putting the content of a form into an e-mail message, or turning the data into a database query.

You can often see that a CGI program is being used by seeing "cgi-bin" in a URL, but not always.

Client - A software program used to contact and obtain data from a software program on another computer, often from a great distance. Each client program is designed to work with one or more specific kinds of server programs, and each server requires a specific kind of client. A web browser is a specific kind of client.

Cookie - A cookie is a text file placed on your hard drive by some web pages that you have visit. It is a piece of information sent by a web server to a web browser that the browser software is expected to save and to send back to the server whenever the browser makes additional requests from the server.

Depending on the type of cookie used and the browser's settings, the browser may or may not accept the cookie, and may save the cookie for a short or a long period of time.

The cookie allows the webmaster to track visits to their web site as well as correlate that information with other information such as the previous page you visited, your operating system, your browser, plus information you volunteer via a form.

When you return to that web site the site will retrieve your cookie file from your hard drive and use whatever information is stored to target content and advertising to your stated preferences (where asked) and the behavior you exhibited.

When a server receives a request from a browser that includes a cookie, the server is able to use the information stored in the cookie. For example, the server might customize what is sent back to the user, or keep a log of particular user's requests.

This technology allows you to store items in an electronic shopping basket and "remember" other useful pieces of information such as passwords.

Cookies usually are set to expire after a predetermined period of time and are usually saved in memory until the browser software is closed down, at which time they may be saved to disk if their "expire time" has not been reached.

Cookies DO NOT read your hard drive and send your life story to the CIA, but they can gather information about a user that would be impossible without them.

Domain name - The unique name that identifies an Internet site. Domain names always have two or more parts, separated by dots. The part on the left is the most specific, and the part on the right is the most general. A given machine may have more than one domain name but a given domain name points to only one machine.

Usually, the right-hand portion of a domain name is the same for all computers on a given network, e.g. Gateway.gbnetwork.com; mail.gbnetwork.com; www.gvnetwork.com; and so on. It is also possible for a domain name to exist but not be connected to an actual machine. This is often done so a group or business can have an Internet e-mail address without having to establish a real Internet site. In these cases some real Internet machine must handle the mail on behalf of the listed domain name.

Encryption - A procedure for encoding data which makes it difficult to decode data without proprietary software or hardware. This procedure protects data or software from unauthorized access or use.

FAQ (Frequently Asked Questions) - FAQs are documents that list and answer the most common questions on a particular subject. There are hundreds of FAQs on a variety of subjects such as pet grooming and cryptography. FAQs usually are written by people who have tired of answering the same question over and over.

FTP (File Transfer Protocol) - Provides a scheme for transferring plain-text or binary files between computers. Many data-resource computers provide limited read-only access with the user name "anonymous" which is how WWW browsers retrieve files from URLs of the form ftp://compute/file.

Gateway - The technical meaning is a hardware or software set-up that translates between two dissimilar protocols. For example, Prodigy has a gateway that translates between its internal, proprietary e-mail format and Internet e-mail format. Another, sloppier meaning of gateway is to describe any mechanism for providing access to another system, e.g. AOL might be called a gateway to the Internet.

Hit - Each time a browser asks for a piece of information or a file from a server it registers a hit. Most web pages contain several files including individual graphic images, audio clips, text and HTML documents. Since multiple hits can be caused by one or many visitors, hits can be a misleading way to measure the effectiveness of a web site or web page.

Home page - An HTML file usually displayed first when a user accesses a particular Web site. Provides access to other information contained at the site. Could also be the web page your browser is set to when it starts up.

HTML (HyperText Markup Language) - The coding language used to create Hypertext documents for use on the World Wide Web.

HTTP (HyperText Transport Protocol) - The protocol for moving hypertext files across the Internet. Requires an HTTP client program on one end, and an HTTP server program on the other end.

Internet - The vast collection of inter-connected networks which use the TCP/IP protocols and evolved from the Arapnet of the late '60s and early '70s.

IP number (Internet protocol number) - Sometimes called a "dotted quad." A unique number

consisting of four parts separated by dots, e.g. 165.113.245.3. Every machine on the Internet has a unique IP number. Most machines also have one or more Domain Names that are easier for people to remember.

ISP (Internet service provider) - An institution that provides access to the Internet in some form. Usually there is a monthly fee associated with the access.

Java - A programming language developed by Sun Microsystems specifically for writing programs which can be safely downloaded and computer without fear of viruses or harm to your computer and files. Using small java Programs (called applets), web pages can include functions such as animations, calculators, and other fancy tricks.

Mosaic - The first WWW browser available for Macintosh, Windows, and UNIX, all with the same interface.

MUD (Multi-User Dungeon or Dimension) - A (usually text-based) multi-user simulation environment. Some are purely for fun and flirting, others are used for serious software development or education purposes and all that lies in between. A significant feature of most MUDs is users can create things which stay after they leave and with which other users can interact in their absence, thus allowing a world to be built gradually and collectively.

MUSE (Multi-User Simulated Environment) - One kind of MUD, usually with little or no violence.

Netscape - A WWW browser and the name of a company. The Netscape (tm) browser was originally based on the Mosaic program developed at the National Center for Supercomputing Applications (NCSA).

PDF (Adobe's Page Description Format) - Often used as a format which allows more control of a page, its graphics and text than that of conventional HTML. It requires a browser plug-in (such as Adobe Acrobat) to view a web page in PDF format.

Plug-in - Software program additions that allow you to take advantage of new technologies and capabilities from a browsers. You can frequently download plug-ins free from the author's web site, with their permission, for free.

POP (point of presence) - A local dial-in point for an Internet service provider. A second meaning, post office protocol, refers to the way e-mail software such as Eudora retrieves mail from a server. A POP account usually is included with SLIP, PPP or shell accounts, which you tells your e-mail program where to get your mail.

Portal - Usually used as a marketing term to described a web site that is or is intended to be the first place people see when using the web. Typically, a portal site has a catalog of web sites, a search engine, or both. A portal site also may offer e-mail and other service to entice people to use that site as their main "point of entry" (hence "portal" to the web).

PPP (point to point protocol) - A set of rules that allow a computer to use TCP/IP over a telephone line to become a node on the Internet. PPP was developed to replace SLIP.

Server - A computer, or a software package, that provides a specific kind of service to client software running on other computers. The term can refer to a particular piece of software, such as a WWW

server, or to the machine on which the software is running, e.g. Our mail server is down today, that's why e-mail isn't getting out. A single server machine could have several different server software packages running on it, thus providing many different servers to clients on the network.

SLIP (Serial Line Internet Protocol) - A standard for using a regular telephone line (a serial line) and a modem to connect a computer as a real Internet site. SLIP is gradually being replaced by PPP.

SMDS (Switched Multimegabit Data Service) - A new standard for very high-speed data transfer.

SMTP (Simple Mail Transfer Protocol) - The protocol used on the Internet to exchange e-mail.

SNMP (Simple Network Management Protocol) - A protocol used to monitor and control nodes on a network.

Streaming - Technology that permits continuous audio and video to be delivered to your computer from a remote web site. A high degree of compression is required to transfer audio and/or video at normal modem speeds while retaining sound and picture quality.

SSL (Secure Sockets Layer) - A protocol designed by Netscape Communications to enable encrypted, authenticated communications across the Internet. SSL is used mostly (but not exclusively) in communications between web browsers and web servers. URLs that begin with "https" indicate that an SSL connection will be used.

SSL also provides: Privacy, Authentication, and Message Integrity.

In an SSL connection, each side of the connection must have a security certificate, which each side sends to the other. Using its own information, each side encrypts what it sends with the certificate of the other side, ensuring only the intended recipient can de-crypt it, and that the other side can be assured the data came from where it claims to have come from, and no tampering to the message.

TCP/IP (Transmission Control Protocol/Internet Protocol) - Transport layer protocol is the method used to transport packets of information or data across the network, thus providing the basis for reliable connections between computers on the Internet. Internet protocol defines datagrams as the unit of information passed across the network.

Upload - The process of sending a complete file to the host computer.

URL (Universal Resource Locator) - A string of characters that identifies a specific location and item located on the web.

Virus - A destructive program that has the ability to reproduce itself and infect other programs or drives on your computer.

WWW (World Wide Web) - Frequently used (incorrectly) when referring to "The Internet", WWW has two major meanings - First, loosely used: the whole constellation of resources that can be accessed using Gopher, FTP, HTTP, telnet, USENET, WAIS and other tools. Second, the universe of hypertext servers (HTTP servers) which allow text, graphics, sound files, etc. to be mixed together.