

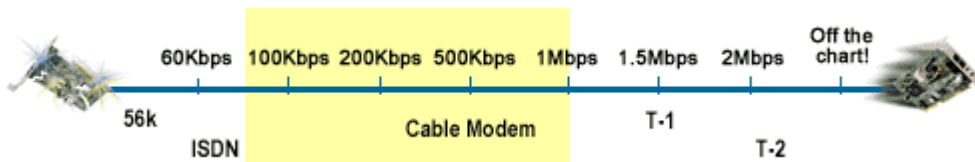
Technology Glossary

ASCII

Basically, it is a text file with no formatting, such as bold, italics, etc. This is the worldwide standard for the code numbers used by computers to represent all the upper and lower-case Latin letters, numbers, punctuation, etc.

Bandwidth

How much stuff you can send through an Internet connection. This can range from 28.8bps dial up access (the minimum speed that makes it faster than getting in your car and driving it there) to T-1 lines. (See below)



BBS, Bulletin Board System

A computerized meeting and announcement system that allows people to carry on discussions, upload and download files, and make announcements without the people being connected to the computer at the same time.

Bookmark

"Bookmarking" a site just means adding it to your browser's address book. When someone bookmarks your site, it hopefully means they're going to come back.

Browser

Software that is used to look at various kinds of Internet content. (See picture)



Cable Modem

A modem that connects you to the Internet through the same co-axial cable that delivers television shows to your home. The connection speed is much faster than most modems that connect your computer through a phone line.

Client

A software program that is used to contact and obtain data from a *Server* software program on another computer.

Cookie

Delicious confection that is frequently consumed while surfing the Internet. (See picture)

The most common meaning of “Cookie” on the Internet refers to 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.



Basically, cookies allow Websites to keep information about you so that you don't have to re-enter it every time you visit that site. Cookies might contain information such as login or registration information, online “shopping cart” information, user preferences, etc.

DSL, Digital Subscriber Line

A method for moving data over regular phone lines. A DSL Internet connection and phone calls can be made on the same incoming phone line. DSL moves information at much greater speeds than a typical modem connection. xDSL refers to different variations of DSL, such as ADSL, HDSL, SDSL and RADSL.

ADSL (Asymmetric DSL) is the "asymmetric" form of DSL. It's called that since most of its two-way bandwidth is devoted to the downstream direction, sending data to the user.

HDSL (High bit-rate DSL) symmetrical DSL type, an equal amount of bandwidth is available in both upstream and downstream directions. Runs over two twisted pairs.

SDSL (Single line DSL) is similar to HDSL, however it runs on a single twisted pair.

RADSL (Rate-Adaptive DSL) is an ADSL technology from in which software is able to determine the rate at which signals can be transmitted on a given customer phone line and adjust the delivery rate accordingly.

Domain Name

The unique name that identifies an Internet site. Examples:

<http://www.nickolodeon.com/>

<http://homepage.mac.com>

<http://www.apple.com/>

Most of the time, a domain name closely resembles the name of what the site is about. Example: <http://www.cafaa.org/> is CAFAA's Website.

E-mail, Electronic Mail

Messages, usually text, sent from one person to another via computer.

Ethernet

A very common method of networking computers in a LAN, or Local Area Network. Ethernet is much faster than modem connections and is supported by most computers.

Fire Wall

A combination of hardware and software that separates a *LAN*, or Local Area Network, into two or more parts for security purposes.

Flame

Originally, flame meant to carry forth in a passionate manner in the spirit of honorable debate. Flames most often involved the use of flowery language and flaming well was an art form. Flame has come to refer to any kind of derogatory comment sent through e-mail.

Flash

A technology from Macromedia that allows for engaging audio and video animations on the World Wide Web. Content hosted with this technology requires a free plug-in from Macromedia's Website, <http://www.macromedia.com/>. This plug-in is installed in your Internet browser application. Flash content plays quickly, even on slow Internet connections, and far surpasses the "text and photo" feel of most Web pages. A site that makes excellent use of Flash is <http://www.disney.com/>.

FTP

(File Transfer Protocol) -- A very common method of moving files between two Internet sites. It can be thought of as point-to-point transferring, whereas some transfers break up files into pieces before sending

GIF, Graphic Interchange Format

A common format for image files, especially suitable for images containing large areas of the same color. GIF format files of simple images are often smaller than the same file would be if stored in *JPEG* format, but GIF format does not store photographic images as well as JPEG.

Hit

As used in reference to the World Wide Web, "hit" means a single request from a web *browser* for a single item from a web *server*; thus in order for a web browser to display a page that contains 3 graphics, 4 "hits" would occur at the server: 1 for the *HTML* page, and one for each of the 3 graphics.

"Hits" are often used as a very rough measure of load on a server, e.g. "Our server has been getting 300,000 hits per month." Because each "hit" can represent anything from a request for a tiny document (or even a request for a missing document) all the way to a request that requires some significant extra processing (such as a complex search request), the actual load on a machine from 1 hit is almost impossible to define.

HTML, HyperText Markup Language

The coding language used to create *Hypertext* documents for use on the *World Wide Web*. HTML looks a lot like old-fashioned typesetting code, where you surround a block of text with codes that indicate how it should appear, additionally; in HTML you can specify that a block of text, or a word, is linked to another file on the Internet. HTML files are meant to be viewed using a *World Wide Web Client* Program, such as *Netscape* or *Mosaic*.

HTTP

(HyperText Transfer Protocol) -- The protocol for moving *hypertext* files across the *Internet*. Requires a HTTP *client* program on one end, and an HTTP *server* program on the other end. HTTP is the most important protocol used in the *World Wide Web (WWW)*.

Hypertext

Generally, any text that contains links to other documents - words or phrases in the document that can be chosen by a reader and which cause another document to be retrieved and displayed.

Internet

The vast collection of inter-connected networks that all use the TCP/IP protocols and that evolved from the *ARPANET* of the late 60's and early 70's. The Internet now (July 1995) connects roughly 60,000 independent networks into a vast global *Internet*.

Intranet

A private *network* inside a company or organization that uses the same kinds of software that you would find on the public *Internet*, but that is only for internal use.

As the Internet has become more popular many of the tools used on the Internet are being used in private networks, for example, many companies have web servers that are available only to employees.

ISP, Internet Service Provider

An institution that provides access to the Internet in some form, usually for money.

Java

Java is a network-oriented programming language invented by Sun Microsystems that is specifically designed for writing programs that can be safely downloaded to your computer through the Internet and immediately run without fear of viruses or other harm to your computer or files. Using small Java programs (called "*Applets*"), Web pages can include functions such as animations, calculators, and other fancy tricks.

We can expect to see a huge variety of features added to the Web using Java, since you can write a Java program to do almost anything a regular computer program can do, and then include that Java program in a Web page.

JavaScript

JavaScript is a programming language that is mostly used in web pages, usually to add features that make the web page more interactive. When JavaScript is included in an *HTML* file it relies upon the browser to interpret the JavaScript. When JavaScript is combined with *Cascading Style Sheets* (CSS), and later versions of HTML (4.0 and later) the result is often called *DHTML*.

JavaScript was invented by *Netscape* and was going to be called "Live Script", but the name was changed to JavaScript to cash in on the popularity of *Java*. JavaScript and Java are two different programming languages.

JPEG

(Joint Photographic Experts Group) -- JPEG is most commonly mentioned as a format for image files. JPEG format is preferred to the *GIF* format for photographic images as opposed to line art or simple logo art. It is also sometimes seen as .jpg.

LAN

(Local Area Network) -- A computer network limited to the immediate area, usually the same building or floor of a building.

Mirror Sites

Generally speaking, "to mirror" is to maintain an exact copy of something. Probably the most common use of the term on the Internet refers to "mirror sites" which are *web* sites, or *FTP* sites that maintain exact copies of material originated at another location, usually in order to provide more widespread access to the resource.

Another common use of the term "mirror" refers to an arrangement where information is written to more than one hard disk simultaneously, so that if one disk fails, the computer keeps on working without losing anything.

Netiquette

The etiquette on the *Internet*.

Netscape

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

Netscape has grown in features rapidly and is widely recognized as the best and most popular web browser. Netscape Corporation also produces web *server* software. Netscape provided major improvements in speed and interface over other browsers, and has also engendered debate by creating new elements for the *HTML* language used by Web pages -- but the Netscape extensions to HTML are not universally supported.

The main author of Netscape, Mark Andreessen, was hired away from the NCSA by Jim Clark, and they founded a company called Mosaic Communications and soon changed the name to Netscape Communications Corporation.

Network

Any time you connect 2 or more computers together so that they can share resources, you have a computer network. Connect 2 or more networks together and you have an *Internet*.

PDF, or Portable Document Format

Adobe's standard file format for viewing content on the Web that must retain its original look and feel. Contracts, forms, brochures, and other PDF content will look the same no matter what type of computer they are viewed on. HTML, the language of the World Wide Web, does not always display the same on similar computer platforms, such as Windows and Macintosh.

Plug-in

A (usually small) piece of software that adds features to a larger piece of software. Common examples are plug-ins for the Netscape® *browser* and web *server*. Adobe Photoshop® also uses plug-ins.

The idea behind plug-ins is that a small piece of software is loaded into memory by the larger program, adding a new feature, and that users need only install the few plug-ins that they need, out of a much larger pool of possibilities. People other than the publishers of the software the plug-in works with usually create plug-ins.

Portal

Usually used as a marketing term to describe 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 may also offer email and other service to entice people to use that site as their main "point of entry" (hence "portal") to the Web.

Posting

A single message entered into a network communications system. e.g. A single message posted to a *newsgroup* or message board.

PPP

(Point to Point Protocol) -- Most well known as a protocol that allows a computer to use a regular telephone line and a *modem* to make *TCP/IP* connections and thus be really and truly on the *Internet*.

QuickTime

A plug-in that enables your Web browser to view video content over the Internet. The connections are not fast enough for full-screen video, but it can be fun to watch movie trailers or independent short video clips at sites such as <http://www.apple.com/quicktime> or <http://www.atomfilms.com/>. This software can be downloaded for free at <http://www.apple.com/quicktime> for Windows and Macintosh computers.

RTF

The Rich Text Format Specification provides a format for text and graphics interchange that can be used with different output devices, operating environments, and operating systems. RTF uses the American National Standards Institute (ANSI), PC-8, Macintosh, or IBM PC character set to control the representation and formatting of a document, both on the screen and in print. With the RTF Specification, documents created under different operating systems and with different software applications can be transferred between those operating systems and applications.

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*.

SMTP

(Simple Mail Transfer Protocol) -- The main protocol used to send electronic mail on the Internet.

SMTP consists of a set of rules for how a program sending mail and a program receiving mail should interact.

Almost all Internet email is sent and received by *clients* and *servers* using SMTP, thus if one wanted to set up an email server on the Internet one would look for email server software that supports SMTP.

Spam (or Spamming)

The electronic version of junk mail. Spam is just as unwelcome in your e-mail mailbox as it is in your postal mailbox.

Example: Neil spammed 500 random e-mail addresses with advertisements for his new business.

Streaming

Waiting for a video clip to download can take as long as 30 minutes, depending on its size. *Streaming* a video means downloading it in small segments. While a user is watching part of a clip, more pieces of the file are downloading in a virtual space behind the scenes. More and more video is fed to the user until the clip is complete.

SSL

(Secure Sockets Layer) -- A protocol designed by Netscape to enable encrypted (secure), authenticated communications across the Internet.

SSL provides 3 important things: Privacy, Authentication, and Message Integrity.

T-1

A *leased-line* connection capable of carrying data at 1,544,000 *bits-per-second*. At maximum theoretical capacity, a T-1 line could move a *megabyte* in less than 10 seconds. That is still not fast enough for full-screen, full-motion video, for which you need at least 10,000,000 bits-per-second. T-1 is the fastest speed commonly used to connect *networks* to the *Internet*, although many high-tech companies may have T-2 (2,316,000bps) or T-3 lines (3,088,000bps).

TCP/IP, Transmission Control Protocol/Internet Protocol

This is the suite of protocols that defines the *Internet*. Originally designed for the *UNIX* operating system, TCP/IP software is now available for every major kind of computer operating system.

UNIX

A computer operating system (the basic software running on a computer, underneath things like word processors and spreadsheets). UNIX is designed to be used by many people at the same time (it is multi-user) and has *TCP/IP* built-in. It is the most common operating system for *servers* on the *Internet*.

URL

(Uniform Resource Locator) –pronounced U-R-L, not earl. The standard way to give the address of any resource on the Internet that is part of the World Wide Web (WWW). A URL looks like this:

<http://www.shockwave.com/>

USENET

A worldwide system of discussion groups, with comments passed among hundreds of thousands of machines. Not all USENET machines are on the *Internet*, maybe half. USENET is completely decentralized, with over 10,000 discussion areas, called *newsgroups*.

VPN, Virtual Private Network

Usually refers to a *network* in which some of the parts are connected using the public *Internet*, but the data sent across the Internet is encrypted, so the entire network is "virtually" private.

A typical example would be a company network where there are two offices in different cities. Using the Internet the two offices merge their networks into one network, but encrypt traffic that uses the Internet link.

Web

Short for World Wide Web. The Web is basically the graphical portion of the Internet. The Internet is to the Web what radio is to television.

Zip

A method for compressing the size of a computer file so that it may be transferred over the Internet more quickly. (i.e. WinZIP)

A small peripheral that plugs into personal computers and provides external file storage on 100 megabyte or 250 megabyte diskettes.

