

Glossary of Technical Terms

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The following terms relate to technology are defined with either the on-line encyclopedia Webopedia (<http://www.webopedia.com>) or their common meaning.

Active Directory	A proprietary directory service from Microsoft. See Directory Service .
AD	See Active Directory .
Aggregation	Combining data from disparate sources(typically across a network) within a single database or group of databases.
AIX	A UNIX operating system from IBM.
Apache	An open source web server. Competes with IIS . Apache is the market leader at over 60% market share.
Application	A computer program.
Application Programming Interface	Source Code level software developer instructions detailing how one program can call another.
Application Server	A Server that can run ASP s JSP s and Servlets .
Application Service Provider	Programs run on a mid-sized computer that handle all application operations between browser-based computers and an organizations' back-end business applications or databases .
Active Server Pages	A programmed response to web requests built with tools from Microsoft.
API	See Application Programming Interface .



ASP	Definition of ASP is dependent on the context in which it is used. If it is used in the programming context, see Active Server Pages . If it used in the business entity context, see Application Service Provider .
Asymmetric Encryption	See Public-key Encryption .
Asynchronous	Sending a request to a server and coming back at a later time to look at the reply. The opposite of Synchronous .
Authentication	Verification of identity of a person or program . Not to be confused with Authorization .
Authorization	The process of granting rights, permissions and access to services . Not to be confused with Authentication .
Bastion Host	A gateway between an inside network and an outside network .
Bit	Short for binary digit, the smallest unit of information on a machine . Typically represented as a 1 or 0; “on/off”, “yes/no” or “true/false” respectively”.
BizTalk	The term used to describe Application Server applications Microsoft.
Bookmark	A browser artifact the represents the URL of a website. Typically, a list of bookmarks is managed by the browser as a convenience for the user.
C	A programming language that is used to develop software.
C++	A programming language that is used to develop software.



C#	A programming language from Microsoft designed for their .NET suite of tools. Competes with Java .
Client	An application that requests a service from another computer (server) .
Closed Source	An application whose source code is proprietary or not available. See Freeware, Shareware and Proprietary .
Compiler	Software that converts human readable instructions into a form that is easier for a machine to process.
Computer	A programmable machine .
Cracker	A software engineer who creates or modifies code with intent of causing mischief. Commonly referred to as a Hacker .
Cross-Platform	A program that can operate, unmodified, on more than one platform .
Database	A Repository that includes tools or techniques to aid in the storage and retrieval of data.
Datamining	Producing summary level information from transactional level information. A technique used to derive demographic or characteric summaries.
Decode	The process or substituting characters in a transmission for protocol compatibility reasons.
Decryption	The process of decoding data that has been encrypted into a secret format.
Demilitarized Zone	Used by a company that wants to host its own Internet services without sacrificing unauthorized access to its private network . The portion of the private network that is visible through the network' firewall .



Digital	Describes any system based on discontinuous data or events.
Digital Certificate	An attachment to an electronic message used for security purposes. One common use of a digital certificate is to verify that a user sending a message is who he or she claims to be, and to provide the receiver with the means to encode a reply. Another use is to authenticate a client with a server (see SSL).
Digital Rights Management	A system for protecting the copyrights of data circulated via the Internet by enabling secure distribution and/or disabling illegal distribution of the data.
Directory Service	A Service that allows organizations to centrally manage and share information on network resources and users often while acting as the central authority for security.
DMZ	See Demilitarized Zone .
Domain Name Service	An Internet service that translates human readable domain names into IP addresses . Because domain names are alphabetic, they're easier to remember.
Download	The process of making a copy of information on one computer on another computer . Protocols such as FTP , POP , IMAP and HTTP are typically used to download information. The user who desires a copy initiates the request. The opposite of upload .
DNS	See Domain Name Service .
DRM	See Digital Rights Management .
E-mail	Short for electronic mail, the transmission of messages over communications networks .
Encode	The opposite operation of decode .



Encryption	The translation of data into a secret code. The opposite of decryption .
Eudora	An MUA that competes with Mutt and Outlook and is available on Windows and OS/X systems.
Evolution	An Open Source MUA . Competes with Outlook and is available on UNIX systems.
Exchange	A proprietary groupware and e-mail server program from Microsoft that uses an internal LDAP structure to describe users. Competes with POSTFIX .
Executable Code	Machine-readable instructions, ready for execution by a computer .
File Transfer Protocol	A protocol used on the Internet for sending files.
Firewall	A system designed to prevent unauthorized access to or from a private network. See Bastion Host and Zoned Firewalls.
Form Factor	A popular expression used to describe the physical shape of a device . Examples include a “cell phone form factor” or “gameboy form factor”.
Freeware	Software that is made available without a fee and with unknown licensing. Typically source code is not included. Freeware is not the same as Open Source .
FTP	See File Transfer Protocol .
Gateway	A node on a network that serves as an entrance to another network .
GNU Public License	A popular license for Open Source software.



GPL	See GNU Public License .
Hacker	See Cracker .
HTML	Short for HyperText Markup Language, the authoring language used to create documents on the World Wide Web.
HTTP	Short for HyperText Transfer Protocol, the underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands.
HTTPS	Identifies Secure HTTP (or S-HTTP); the ability to operate HTTP over SSL .
HyperLink	A selectable connection (linkage) from one program to another. Also called a link . Typically found in HTML pages.
IDE	When used in the software tool context, it refers to an Interactive Development Environment . When used in a hardware context, it refers to a type of hard drive..
IIS	See IIS .
IMAP	See Internet Message Access Protocol .
Instant Messaging	Applications that use the Internet to pass text-based messages between two users. Differs from e-mail because the protocol used does not require that the messages have identifying containers and no copies of the message kept by either party.



Interactive Development Environment

A tool used by software developers to aid in the writing of **source code**.

Internet

A global **network** connecting millions of **computers**.

Internet Information Server

An proprietary web server from Microsoft. Competes with **Apache**.

Internet Message Access Protocol

A **protocol** used by **MUAs** to access **e-mail** messages without removing them from the server.

Internet Service Provider

Provides connections to the **Internet**, e-mail service and sometime web page hosting services. Not to be confused with an **ASP**.

Internet 2

Used in a business context, it refers to business models in the post dot-com era. Used in a technical context, it refers to **IPV6**.

Intranet

A local **network** connecting a finite number of **computers**. Typically operated within a business or organization with no connection to the **Internet**.

Intrusion

An attempt to break into or compromise a system. An activity of a **cracker**.

IP Address

An identifier for a **computer** or device on a **TCP/IP network**.

IPV6

A new addressing approach designed to ensure the **Internet** does not run out of **IP addresses**.

ISP

See **Internet Service Provider**.

Java

A **cross-platform** language, proprietary language from Sun Microsystems that is used to develop software. Competes with **C#**.



Javascript	Provides executable capabilities within a browser and is embedded within HTML . Has nothing to do with Java .
JDBC	A standard API for connecting Java software with SQL Databases .
JSP	A Java framework for building Internet applications.
JXTA	A Java framework for building P2P applications.
Key	A password or table needed to decipher encrypted data. When used in a database context, a short series of numbers and letters used to identify other data (such as a Social Security number being used to find a customer or agent record).
Keywords	Typically refers to words that placed within an HTML page to identify its contents. Ex: Property, Condo, Riverfront. Some search engines use these words to identify the topic(s) covered by the HTML document. The more proper term for these are META TAGS . See Meta Tag .
LDAP	See Light Directory Access Protocol .
Lesser GNU Public License	A popular license for Open Source software.
Light Directory Access Protocol	A standard protocol to access a Directory Service .
LGPL	See Lesser GNU Public License .
Linux	An Open Source UNIX -like operating system.
Link	A common term to describe a HyperLink . See HyperLink .



Listserv	An e-mail based system that broadcasts all messages to a group of subscribed users.
Machine	See Computer .
Mail Transport Agent	An e-mail server .
Mail User Agent	An e-mail user agent or mail client .
Malicious Scripts	Refers to browser instructions that are downloaded as part of an HTML page that perform covert operations. Typically, the behavior can include redirecting the user some place else, disabling (or changing) browser functions or reporting back personal information.
Metadata	Data that describes data. The following fragment is an example of metadata; “the table has 2 rows and 7 columns”. The numbers 2 and 7 are the metadata elements.
Meta Tag	Metadata for HTML documents used to control browser behavior or to identify the document contents. Use of meta tags are completely optional. See Keywords .
Microsoft SQLServer	A proprietary relational database from Microsoft.
MISMO	A data format standard sponsored by the Mortgage Brokers. Competitive with RETS .
Module	A part of a program.
MTA	See Mail Transport Agent .
MUA	See Mail User Agent .
MySQL	An Open Source relational database .



Network	A group of two or more computer systems linked together.
Node	A computer or device on a network .
ODBC	A standard for connecting applications with relational databases .
Open LDAP	An Open Source LDAP Server . Competes with Active Directory .
Open Source	A program in which the source code is available to the general public for use and/or modification from its original design free of charge. Often confused with Freeware and Shareware .
Operating System	The most important program that runs on a computer . Every general-purpose computer must have an operating system to run other programs. Operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers.
Oracle	A proprietary relational database from the Oracle Corporation that supports many platforms . Oracle is the market leader.
Outlook	A proprietary MUA and PIM from Microsoft that competes with Evolution .
Outlook Express	A proprietary MUA from Microsoft that has fewer features than Outlook .
P2P	See Peer-to-Peer .
Packet	A unit of information (piece of a message) transmitted over a packet-switching network .



Packet Filter	Looks at each packet entering or leaving the network and accepts or rejects it based on user-defined rules.
Packet-switching	Refers to protocols in which messages are divided into packets before they are sent. Each packet is then transmitted individually and can even follow different routes to its destination. Once all the packets forming a message arrive at the destination, they are recompiled into the original message. TCP/IP is a packet-switching network.
Password	A secret series of characters that enables a user to access a file, computer , or program .
Payload	The data section of a transmission .
Peer	A node in a P2P Network .
Peer-to-Peer	Architectures that perform operations on a distributed bases. The opposite of aggregation ..
Perl	A cross-platform interpreted scripting language that is used to develop software. Best suited for applications that process large amounts of text.
Personal Information Manager	A program that provides contact lists and calendaring functionaity.
PHP	A cross-platform interpreted scripting language that is used to develop software. Best suited for Internet applications.
PIM	See Personal Informaiton Manager .
PKI	Short for Public Key Infrastructure, a system of digital certificates , Certificate Authorities, and other registration authorities that verify and authenticate the validity of each party involved in an Internet transaction.



Platform	Typically used to describe a combination of hardware and operating system . A common desktop platform is called “wintel” denoting Microsoft Windows running on a computer with an Intel CPU. In common usage, Unix is also called a platform.
Plug-in	An optional hardware or software module that adds a specific feature or service to a larger system.
POP	Short for Post Office Protocol, a protocol used to retrieve e-mail from a mail server . The latest version of this protocol is called POP3.
Port	When used in the context of the Internet , a connection location used by the computer to read or write. In the development context, it means the work required to move a set of software from one platform to another.
Program	An organized list of instructions that, when executed, causes the computer to behave in a predetermined manner.
Proprietary	Software or data formats that are not published or made available to developers. Proprietary products are typically accompanied by a usage license, upfront purchasing fee and a recurring maintenance fees.
Protocol	An agreed-upon format for transmitting data between two devices or applications .
Public-key Encryption	Also called Asymmetric Encryption. A cryptographic system that uses two keys; a public key known to everyone and a private or secret key known only to the recipient of the message.
Pull	Process of requesting data from another program or computer . The opposite of pull is push . The terms push and pull are used frequently to describe data sent over the Internet .



Push	To send data to a client without the client asking for it. The opposite of push is pull . The terms push and pull are used frequently to describe data sent over the Internet .
Relational Database	A database that uses standard, SQL syntax to store and retrieve data.
Remote Procedure Call	The process of executing a command on a remote server .
Repository	A physical storage of data on a hard drive. This term does not imply only a commercial database system, but can be used in that manner.
RETS	The Real Estate Transaction Standard. Provides a vendor neutral standard approach to data access and is sponsored by NAR. Competitive with MISMO .
RFC	Open Standards published by the IETF. These standards cover most protocols in use today.
RPC	See Remote Procedure Call .
Router	Hardware that is used to connect networks together. Messages received over the wires are relayed, intact.
S-HTTP	See HTTPS .
Scraping	Using a software program to read an HTML page for the purpose of gathering information. Used to produce an unauthorized copy of data that was originally intended to be view. “Scraped” data is typically stored in a database .



Search Engine	An Internet service that maintains a catalog of websites. The catalog can be accessed through a browser and relies on keywords to identify HTML pages of interest.
Secure Shell	Originally developed by SSH Communications Security Ltd., Secure Shell is a secure, encrypted network protocol used to log into another computer over a network , to execute commands in a remote machine , and to move files from one machine to another.
Secure Sockets Layer	An encrypted protocol for transmitting private communications via the Internet .
Server	A computer or device on a network that provides services to clients .
Service	A task performed by software on a Server .
Servlet	A Java program that runs inside of an Application Server .
SGML	A cross-platform technique to format data. The forerunner of HTML and XML .
Shareware	Software that is made available with a trial period and nominal fee. Typically source code is not included. Shareware is not the same as Open Source .
Simple Mail Transport Protocol	A protocol for sending e-mail messages between servers .
SMS	A standard protocol used to send text messages between mobile phones and pagers.
SMTP	See Simple Mail Transfer Protocol .
Spam	A term used to describe unsolicited e-mail messages that typically contain advertising.



SOAP	A standard approach to building a Web Service . Synonymous with BizTalk .
Socket	A connection between two computers . The connection of two ports .
Solaris	A proprietary UNIX operating system from Sun Microsystems.
Source Code	Human readable computer instructions. Before Source Code can be used, it must be processed by a compiler and converted into a form that is easier for a computer to process.
SQL	See Structured Query Language .
SQLServer	See Microsoft SQLServer .
SSH	See Secure Shell .
SSL	See Secure Sockets Layer .
Structured Query Language	A standard for relational databases that uses rows and tables to organize data. The standard does not address the sharing of disk versions of data between vendors.
Symmetric Encryption	A type of encryption where the same key is used to encrypt and decrypt the message.
Synchronous	Sending a request to a server and waiting for a reply. The opposite of Asynchronous .
System	See Computer.
TCP/IP	Abbreviation for Transmission Control Protocol/Internet Protocol, the suite of communications protocols used to connect hosts on the Internet .



Tomcat	An Open Source Java Application and Web Server .
Transmission	See TCP/IP .
Transport	The portion of a transmission that provides instructions about payload handling.
Trust Hierarchy	See PKI .
UNIX	A family of operating system offered in several variations from commercial vendors and the Open Source community. Source code is typically available.
Universal Resource Locator	A human-readable form of an IP Address . A DNS service maintains a mapping of this more convenient form of an address to the technical form, an IP Address .
Upload	The process of making a copy of information on one computer on another computer . Protocols such as FTP , SMTP and HTTP are typically used to upload information. The user who wants another user to have the copy initiates the request. The opposite of download .
URL	See Universal Resource Locator .
VB	See Visual Basic .
Visual Basic	A programming language from Microsoft that is used to develop software. Best suited for applications that need to integrate with other Microsoft applications.



Virtual Private Network	A network that appears to have a select number of machines connected to it. Typically, these Virtual Private Networks are used to connect a select number of users together over the public Internet . A way to extend a private network over public a public network utilizing strong authentication and encryption .
Virus	Self-replicating, malicious software designed by crackers that attach to other software (programs) or otherwise “hide” within the file system.
VPN	See Virtual Private Network .
WAP	See Wireless Application Protocol .
Watermark	A pattern of bits inserted into a digital image, audio or video file that identifies the file' s copyright information (author, rights, etc.).
Web Service	An RPC typically called over web-based technology.
Websphere	A proprietary Application and Web Server from IBM based on Apache .
WEP	Short for Wired Equivalent Privacy. The original security system used by Wi-Fi networks to secure access to the network. Client computers must supply a key to connect to the network .
Wi-Fi	See Wireless Fidelity
Wireless Application Protocol	A newer, more secure approach for Wi-Fi that allows the server to identify which client machines can connect to the wireless network.
Wireless Fidelity	A wireless network and is typically governed by the 802.11 standard.
Wireless Network	See Wireless Fidelity .



Worm	Self-replicating, self-spreading and malicious software designed by crackers that are free standing programs that propagate from machine to machine .
XML	A cross-platform technique to format data. Related to SGML .
Zoned Firewall	A firewall that uses two machines to form a DMZ .
.NET	A proprietary application environment technology sponsored by Microsoft designed to compete with Java .
802.11b and 802.11g	See Wireless Fidelity .

